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Sisclosure; Page 5; 27pp; English.

The present sequence represents an analogue, MCP-1 (10-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the CP-1 tracks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 creeptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared Sequence 66 AA;
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(LEWI/) LEWIS I.
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WPI: 97-165844/16.
N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1)
lacks MCP-1 activity and inhibits receptor binding, useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Monocyte chemoattractant protein analogue MCP-1 (10-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
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W13598 standard; peptide; (W13598;
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                                                                                                                                                                                                                         receptor binding; ant chronic inflammatory
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Human SDF-1-alpha.
Protein encoded by cD
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o acid sequence o
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IL-8]77 leukocvt
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42 eicadpkgkwvg 53 ||||||||||| 1 EICADPKQKWVQ 12 Query Match Best Local S

h 100.0%; Similarity 100.0%;

Score 97; DB 24; L Pred. No. 4.79e-03; 0; Mismatches 0;

Length

0;

Gaps

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Conservative jkwvq 53

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AC W13597;
AC W13597;
DT 07-NOV:
DT Wnoncytck
KW Truncatc
KW Truncatc
KW 1ung d1:
OS Homo sai
PN 19-JUN:
PR 19-JUN:
PR (LEWI/)
PI Gong J,
DI Gong J,
PI Gong J,
PI Gong J,
PI Hacks M
PT 18-KS M
PT 18
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PT anti-inflammatory agent

Claim 7; Page 5; 27pp; English.

CC The present sequence represents an analogue, MCP-1 (9-76), of monocyte Chemoattractant protein-1 (MCP-1). The analogue, which lacks the CC N-terminal amino acids 1-8 of MCP-1, acts as an antagonist of MCP-1 (as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 (cc expetor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration composed and other cells e.g. basophils and lymphocytes into cc inflammation sites. MCP-1 has been implicated in allergic and chronic clinflammatory diseases e.g. arthritis, arteriosclerosis and several lung competes more effectively with MCP-1 for binding more receptors than prior art mutant versions of MCP-1 e.g. preferably croviding 50% inhibition of binding at a 25:1 ratio or less, compared cc with 75:1 for prior art mutant 7ND.

Sequence 68 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 anti-inflammatory agent Disclosure; Page 5; 27pp; English.

The present sequence represents an analogue, MCP-1 (11-76), of monocy chemoattractant protein-1 (MCP-1). The analogue, which lacks the N-terminal amino acids 1-10 of MCP-1, acts as an antagonist of MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 biological activity and inhibits binding to a MCP-1 biological activity and inhibits binding to a MCP-1 and MCP-1 biological activity and inhibits binding to a MCP-1 biologic
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WPI; 97-165844]; truncated monocyte chemo:attractant protein-1 (MCP-1)
N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1)
lacks MCP-1 activity and inhibits receptor binding, useful as
anti-inflammatory agent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Monocyte chemoattractant protein analogue MCP-1 (9-76). Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-terminally truncated monocyte chemo:attractant protein-1 lacks MCP-1 activity and inhibits receptor binding, useful
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Homo sapiens.
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19-JUN-1995; CA-152141.
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Similarity 100.0%;
12; Conservative
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Pred. No. 4.79e-03;
0; Mismatches 0;
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Best Local Similarity 100.0%;
Matches 12; Conservative
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Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28 Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of anino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular The peptides can be used to prevent restenosis, e.g. in patients
N-terminally truncated monocyte chemo:attractant protein:1 lacks MCP-1 activity and inhibits receptor binding, useful anti-inflammatory agent Claim 5; Page 5; 27pp; English.

The present sequence represents an analogue, MCP-1 (8-76), chemoattractant protein-1 (MCP-1). The analogue, which lack N-terminal amino acids 1-7 of MCP-1, acts as an antagonist
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Monocyte chemoattractant protein analogue MCP-1 (8-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
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07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC.
ROllins B, Zhang YJ;
WPI; 95-215051/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W13596 standard;
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20-DEC-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   lung disease.
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07-NOV-1997
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des(2-8) MCP-1
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19-JUN-1995; CA-152141.
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97-165844/16.
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been deleted between these
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No. 4.79e-03;
                                              analogue, MCP-1 (8-76), of monocyte The analogue, which lacks the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the native protein residues"
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        antagonist of
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                                                                                                                                                                                                                                               (MCP-1)
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        MCP-1
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Best Local
US5605671-A.
25-FEB-1997.
05-OCT-1992;
05-OCT-1992;
05-OCT-1992;
29-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammation sites. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared with 75:1 for prior art mutant 7ND. sequence 69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wound treatment using monocyte chemotactic factor - has potent therapeutic effect on skin wounds and ulcers Disclosure; Page 12; 22pp; Japanese and ulcers The invention relates to a new remedy for curing wounds which, instead of comprising a growth factor, comprises a monocyte chemotactic activating factor (MCAF) or its variants or derivatives. The factor has potent effect on skin wounds and ulcers. The present sequence is human MCAF, the activity of which is exemplified as the new remedy. Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Monocyte chemotactic activating factor for use as wound remedy. monocyte chemotactic activating factor; MCAF; wound remedy. Homo sapiens. w09507710-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TORA) TORAY IND INC. Matsushima K, Naruto M; WPI; 95-131181/17.
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                                                                                                                                                                                                                                                                                         Mature human monocyte chemoattractant protein-1 (MCP-1). MCP-1; mature chemoattractant protein-1; cytokine; interleukin-8; IL-8; neutrophil activating peptide; labelling; imaging; targeting; radionuclide; infection; inflammation; neoplasm; atheromatous lesio
                                                                                                                                                                                                                                                                                                                                                                                                                             W11131 standard;
W11131;
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05-MAR-1996 (first entry)
                                                                                                                                                                                        misc_difference
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13-SEP-1993;
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US-956862.
US-235659.
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JP-227385.
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Pred. No. 4.79e-03;
0; Mismatches 0
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No. 4.79e-03;
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Best Local
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W11131 represents mature human monocyte chemoattractant protein-1 (MCP-1). MCP-1 was radionuclide labelled and used in a method for imaging a target site in vivo in an animal. Labelled MCP-1 was allowed to accumulate at a target site (having MCP-1 receptors) in the animal and detected so as to image the target site. Any Cys-Cys or Cys-Xaa-Cys chemokine carrying either iodine-123 or iodine-131 can be used in the method. Especially preferred is neutrophil activating peptide-2 (NAP-2) which recognises interleukin-8 receptors and is labelled with technetium-9m, indium-111, copper-62, rhenium-186 or rhenium-188.
The method can be used for imaging a site of infection, inflammation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (DAIN) DAINIPPON PHARM CO LTD.

[Fukui T, Matsuo N, Yamada M, Yamagishi J;

WPI; 92-398864/48.

N-PSDB; Q30745-46.

Prodn. of polypeptide(s) having monocyte chemotactic activity -
using expression plasmids with E. coli elements and specific
E.coli strains

Claim 1; Page 48 + Page 36; 56pp; English.
An expression plasmid, pHM483, for producing MCF(76) consisting
of 76 amino acids was constructed. The prod. can be used for e-
treating bacterial infectious diseases.

Sequence 76 AA;
                                                                                                           P90292 standard; peptide; 76 AA
P90292;
17-JAN-1990 (first entry)
Peptide from human glioma cell
Glioma; leucocyte; chemotaxis;
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27-APR-1992; J00550.
09-MAY-1991; JP-135950.
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(UNMI ) UNIV MICHIGAN.
(UNMRel SL, Lyle Lr, Strieter RM;
WPI: 97-153541/14.
Radio:labelling neutrophil-activating peptide(s) -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
W09219737-A.
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MCF.
modified_site
                                                                                         Human.
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1 EICADPKQKWVQ 12
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Local Similarity 100.0%;
nes 12; Conservative
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1 EICADPKQKWVQ 12
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                                        Location/Qualifiers
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                                                                                                                                                                     cell line U-105MG
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Pred. No. 4.79e-03;
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Pred. No. 4.79e-03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis

Claim 3; Page 11; 22pp; English.

Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

Chair and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

Chair and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

Chair and Cellular Biology artery angioplasty.
                                                                                                        Query Match
Best Local S
Matches 1
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07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER II
ROLLINS B, Zhang YJ;
WPI; 95-215051/28.
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20-JUL-1989; 030423.
31-JAN-1989; US-30423.
31-JAN-1989; US-304234.
(USSH) US Dept. of Health and H.
YOShimura T; Robinson E; Appell
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R87675 standard; protein;
R87675;
21-FEB-1996 (first entry)
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Peptide is derived from glioma cell line U-105MG (ATCC CRL0932) or from leukocytes and has mol. wt. 8400. Used to treat infections and neoplasms. Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 89-263501/36.

New peptide with specific chemotactic activity for monocytes from glioma or leucocyte cells, useful for treating infections
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Local Similarity 100.0%;
hes 12; Conservative
                              50 eicadpkqkwvq
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100.08;
Similarity 100.08;
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Appella E; Leonard E.
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No. 4.79e-03;
                                                                                                                                 DB 14;
4.79e-03;
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Best Local Similarity 100.0%;
Matches 12; Conservative
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22-OCT-1992; US-965678.
27-MAY-1994; US-250958.
(UNMI) UNIV MICHIGAN.
(UNME) SL, Lyle LR, St.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Anti-sense Monocyte Chemotactic Protein-1 oligo:nucleotide(s) - useful for therapy or diagnosis of restenosis, etc.

Disclosure; Column 13-14; 16pp; English.

This is the amino acid sequence of the human monocyte chemoattractant protein (MCP)-1, a member of the C-C chemokine family. MCP-1 is a potent stimulator of monocyte chemotaxis and is produced by injured vascular smooth cells thus attracting monocytes and macrophages which infiltrate the injured area and release growth factor. This causes proliferation of the vascular smooth cells resulting in restenosis. The gene sequence can be used to generate antisense sequences e.g. T48093-7, which can be used to inhibit in vitro MCP-1 prodn. by mononuclear cells e.g. lymphocytes of macrophages, or smooth muscle cells, esp. in order to prevent vascular restenosis, or smooth muscle cells, esp. in order to prevent vascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R53398 standard; Protein; 76 AA. R53398; 15-DEC-1994 (first entry)
Anti-sense monocyte chemotactic protein-1 oligo:nucleotide(s) and peptide(s) - is used for inhibiting, treating or imaging areas of vascular restenosis or potential restenosis
Disclosure: Page 5: 42pp; English.
The sequences given in R53398-99 represent sense and antisense monocyte chemotactic protein-1 (MCP-1) respectively. These
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                                                                                                                                                                         Lyle LR;
WPI; 94-151314/18.
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20-OCT-1993; U10074.
22-OCT-1992; US-965678.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diagnosis;
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W09374;
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Pred. No. 4.79e-03;
0; Mismatches 0;
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beta; emitting isotope;
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Best Local Similarity 100.0%;
Matches 12; Conservative
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Best Local :
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                                                       R87676 standa
R87676;
R87676;
21-FEB-1996
                                                                                                                                                                                                                                                           Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28 Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1899. The peptides can be used to prevent restenosis, e.g. in patients sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  oligonucleotides may be labelled with a radionuclide and use therapeutically for the treatment of vascular restenosis. Radiolabelled antisense MCP-1 compounds may be constructed using high energy alpha or beta emitting isotopes rather than the gamma emitters cutomarily used for diagnostic purposes. Antisense MCP-1 compounds inactivate MCP-1 or inhibit production of MCP-1 so that monocytes are not attracted to the area of vascular injury and proliferation of vascular cells is inhibited. Sequence 76 AA;
             (24-Arg) MCP-1.
monocyte chemoattractant protein;
angioplasty.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - a capable of inhibiting the monocyte chemo-attractant activity endogenous MCP-1 and can be used to treat restenosis Claim 6; Page 11; 22pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disulfide_bond
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R87677 standard;
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WPI; 95-215051/28.
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12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC
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Homo sapiens
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                                                                                                                                             y Match 100.0%;
Local Similarity 100.0%;
hes 12; Conservative
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                                                                                                                                                                                                                      97; DB 14;
No. 4.79e-03
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No. 4.79e-03;
                           MCP-1;
                             mutant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mutant;
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                                                                                                                                                                                                                                    Length 76;
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Best Local S
Matches 1
Disclosure: Page 5; 50pp; English.

Disclosure: Page 5; 50pp; English.

This sequence represents the mature form of monocyte chemotactic protein-1 (MCP-1). MCP-1 is a member of the "C-C" family of chemoattractant cytokines or chemokines. It is a potent stimulator of monocyte chemotaxis and has an extemely high degree of specificity for this cell type. MCP-1 is produced by injured vascular smooth muscle cells and attracts the monocytes and macrophages which infiltrate the area, releasing growth factors and resulting in proliferation of vascular smooth muscle and restenosis. Nucleic acid molecules which are antisense to the MCP-1 mRNA may be used to inhibit translation of MCP-1 and so may be useful for inhibiting vascular restenosis, partic. following balloon angioplasty or a related process. The molecule may be radiolabelled to increase its therapeutic effect or for imaging areas of potential
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      endogenous MCP-1 and can be used to treat restenosis
Claim 5; Page 11; 22pp; English.
Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28 Tyr by aspartate; (2) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 28 Tyr by aspartate; (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LT 15
R86859
R86859
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W09513295-A1.

W09513295-A1.

07-NOV-1995.

12-NOV-1993; US-152301.

12-NOV-1993; US-152301.

(DAND.) DANA FARBER CANCER INST INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                               New anti:sense oligo:nucleotide(s) and peptide(s) for inhibiting restenosis - are directed against C-C family cytokine(s) such a monocyte chemotactic protein, opt. radio:labelled for therapy or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense; monocyte chemotactic protein-1; MCP-1; "C-C" family; chemoattractant cytokine; chemokine; stimulation; monocyte; chemotaxis; vascular smooth muscle cell; macrophage; proliferation; restenosis; balloon angioplasty.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - capable of inhibiting the monocyte chemo-attractant activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rollins B, Zhang WPI; 95-215051/28.
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modified_site
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13-JAN-1995; U00605.
14-JAN-1994; US-182917.
(MLCW ) MALLINCKRODT MEDICAL
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Similarity 100.0%;
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Pred. No. 4.79e-03;
0; Mismatches 0
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Best Local
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Best Local Similarity 100.0%;
Matches 12; Conservative
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                                                                 US7330446-A.
25-JUL-1989;
30-MAR-1989;
30-MAR-1989;
US-330446.
(USSH) US Dept. Health at Yoshimura T, Robinson EA WPI; 89-300683/41.
N-PSDB: N91337/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            An expression plasmid, pHMC076 for product of 76 amino acids was constructed. DNA e prepd. using a recombinant plasmid pHMCF7. Sequence 99 AA;
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Prodn. of polypeptide(s) having monocyte chemotactic activity prodn. of polypeptide(s) having monocyte chemotactic activity waina expression plasmids with E. coli elements and specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
Human derived monocyte chemo-attractant peptide prods. - glioma cell line U-105MG or peripheral blood mononuclear Disclosure; fig 2; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                 P95387;
25-JUL-1989 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (DAIN ) DAINIPPON PHARM CO
Fukui T, Matsuo N, Yamada N
WPI; 92-398864/48.
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27-APR-1992; J00550.
09-MAY-1991; JP-135950
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                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                               Human monocyte
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P95387 standard; protein; 99
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24-MAR-1993
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R28663 standard; Protein;
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chemo-attractant peptide; inflammatory disease;
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Appella
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Pred. No. 4.79e-03;
0; Mismatches C
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No. 4.79e-03;
                                                                                                                Leonard
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09-FEB-1995.
26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This is a human-derived monoyte chemo-attractant peptide (MCP-1) sequence MCP-1 exhibits optimal chemotactic activity at a concon of 1nM and has a mol. mass of c.a. 8,400 D. MCP-1 can be used for treating infection eg inflammatory disease, or for the control of neoplasms by accumulation of monocytes at the site of the infection. The corresp. DNA is obtd. by chemical synthesis, by screening reverse trascripts of mRNA from purified blood leukocytes or cell cultures of eg U-373 MG or KMG-5. Sequence 99 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                screening for cpds. with anti-heparanase activity - by detecting inhibition of heparin or heparan sulphate degradation, potentially useful for treating arthritis, restenosis, cancer. Claim 13; Page 49; 60pp; English.
Purified heparanases, prepared under reducing conditions and activated with transglutaminase, are given in R70786-804. Most are prepared by reverse transcription of mRNA from activated huma leukocytes, then cloning of the CDNA into pVL1392 baculovirus vector, and expression in Sf9 cells in the presence of reduced glutathione and dithiothreitol.
                                                                                                             06-APR-1995.
28-SEP-1994; CA0516.
28-SEP-1993; US-127499.
                                                                                                                                                                                                                                                                                                                                               Human monocyte chemoattractant factor hMCP-1.
Human monocyte chemoattractant factor; hMCP-1; chemokine; v
meningitis related homologous antigenic sequence; MRHAS; RV
immunoassay; diagnosis; treatment; prophylactic; bacterial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chemoattractant protein MCP-1.
MCP-1; chemoattractant; heparanase; heparin; heparan sulfate; arthritis; restenosis; cancer; wound healing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R73914 standard; protein; 99
R73914;
05-DEC-1995 (first entry)
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Hoogwerf AJ, Ledbetter SR;
WPI; 95-082239/11.
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29-AUG-1995 (first entry)
(SHAR/) SHARMA L R.
(VALS/) VAN ALSTYNE D.
Sharma LR, Van Alstyne
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                                                                                                                                                                                                                                                                                                                           viral
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Similarity 100.0%;
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.. No. 4.79e-03;
...ra+ches 0;
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5. 4.79e-03;
5. 4.7hes 0; Indels
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Pr New peptide(s) and corresp. antibodies for the treatment of meningitis - the peptide(s) corresp. to homologous antigenic sites on bacterial and viral agents and on chemokine(s), used for detecting and preventing meningitis

Claim 4); Fig 8/10; 98pp; English.

CC R73914 is the chemokine Human monocyte chemoattractant factor hMCP-1.

CC It contains the meningitis related antigenic sequences (MRHAS) claimed in R73895 and R73907, which are recognised by a monoclonal antibody crome the hybridoma Rubella virus (RV)-1. The claimed MRHAS peptides may be used in immunoassays to diagnose the presence of bacterial and/or viral meningitis agents in a sample, or in prophylactic and therapeutic meningitis treatments. The peptides may also be used as CC vaccines against meningitis.

CC NB: Identified by matching corresponding MRHAS peptides.
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Best Local S
Matches 1
                                                                                                                                          antagonist can be used to reduce excessive levels of Ck beta10. Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck beta10 cDNA can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Drol3+ chemokine beta10 or monocyte chemotactic protein 4 variant. Human; chemokine beta10; Ck beta10; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopolesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4;
                                                                                   be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.

Sequence 71 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        asthma and fibrosis
Example 11; Fig 5; 83pp; English.
The present sequence is human chemokine betail (Ck betail)
                                                                                                                                                                                                                                                                                                                                                                                                               monocyte chemotactic protein 4 (MCP-4) Drol3+ variant, which can be used to treat patients deficient in Ck betal0, while a Ck betal0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Polypeptide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (HUMA-) HUMAN GENOME SCI INC.
Adams M, Alderson R, Applebaum E,
Parmelee D, White J;
WPI: 97-435153/40
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23-FEB-1996; WO-U02598.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        leukaemia; MCP-4; Drol3+ variant.
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Local Similarity 100.0%;
nes 12; Conservative
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Pred. No. 4.79e-03;
0; Mismatches 0
Score 93; DB 27; Le
Pred. No. 1.28e-02;
1; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            autoimmune disease, infection,
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                                        Length 71;
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Query Match Best Local S Matches 1

Similarity 11; Conse

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95.9%; 91.7%;

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ID W22673;
AC W22673;
AC W22673;
DT 19-MAR-1998 (first entry)
DE Bac 3 chemokine betal0 or me
KW Human; chemokine betal0; ck
KW elokaemia; MCP-4; Bac 3 var:
W wound healing; haematopoies;
KW chromosome identification; r
KW leukaemia; MCP-4; Bac 3 var:
OS Homo sapiens.
PN W09731098-Al.
PD 28-AUG-1997;
PF 23-FEB-1996; W0-U02598.
PR 23-FEB-1996; W0-U02598.
PR (HUMA-) HUMAN GENOME SCI IN
PI Adams M, Alderson R, Appleb
PATTWELE D, White J;
DR WPI; 97-435153/40.
PT Polypeptide encoding chemok
PT Portein 4 - useful to treat
PT sthma and fibrosis
CC Interact patients deficantagonist can be used to reat
CC monocyte chemotactic proteil
CC antagonist can be used to treat
CC monocyte chemotactic proteil
CC antagonist can be used to treat
CC opportunistic infections, a
CC diseases, psoriasis and neu
CC promotes wound healing, reg
CC antibodies. Labelled Ck bet
CC receptor, while cells expre
CC compounds for (ant)agonist
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The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Bac 3 variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10 cx beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to infectious diseases, allergies, prostaglandin dependent fever and come marrow failure, silicosis, sarcoidosis, hyper-cosinophilic syndrome, lung inflammation and atherosclerosis. Ck beta10 cbn be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
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WO9/33-2
28-AUG-11997.
23-FEB-11996; U02598.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bac 2 chemokine beta10 or monocyte chemotactic protein 4 variant. Human; chemokine beta10; Ck beta10; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; when the transpoint is the first process.
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Adams M. Alderson R. Applebaum
Parmelee D. White J;
WPI; 97-435153/40.
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                                                                                                                                                                                                                                             chromosome identification; monocyte chemotactic protein leukaemia; MCP-4; Bac 2 variant.
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Human; chemokine beta10; Ck beta10; treatment; antagonist;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W22673;
19-MAR-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W22672 standard; Protein;
                                                                                                                                                                                                      Homo sapiens.
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11; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     identification; monocyte chemotactic protein 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95.9%;
llarity 91.7%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 93; DB 27; Le
Pred. No. 1.28e-02;
1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
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The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Bac 2 variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10. Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck beta10 cDNA can be used to isolate genes encoding similar peptides, in gene therapy
Example 11; Fig 5; 83pp; English.

So The present sequence is human chemokine betal0 (Ck betal0) or monocyte chemotactic protein 4 (MCP-4) Droll/2 variant, which can compone to the used to treat patients deficient in Ck betal0, while a Ck betal0 and tagonist can be used to reduce excessive levels of Ck betal0. Ck betal0 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck betal0 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                solid tumour; infection; autoimmune disease; antagonist; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; heematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4; leukaemia; MCP-4; Droll/2 variant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Polypeptide encoding chemokine protein 4 - useful to treat tun asthma and fibrosis
                                                                                                                                                                                                                                                               Polypeptide encoding chemokine beta 4 and protein 4 - useful to treat tumours, autoi asthma and fibrosis
                                                                                                                                                                                                                                                                                                                         (HUMA-) HIMAN GENOME SCI INC.
Adams M, Alderson R, Applebaum
Parmelee D, White J;
WPI: 97-435153/40
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23-FEB-1996; WO-U02598
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19-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 W22674 standard; Protein; 79
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1 EICADPKQKWVQ 12
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Similarity 91.78;
11; Conserva+*--
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
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Pred. No. 1.28e-02;
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tumours, autoimmune disease, infection,
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autoimmune disease, infec
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                                                                                                                                                                                                                                                                                                                                                                Li Y, Lima
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The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Bac 1 variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10. Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck beta10 cDNA can
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Best Local
                                                                                               W17665;
16-DEC-1997 (first entry)
Stem cell mobilising chemokine CKbeta-10.
Haematopoietic cell; parasitic infection;
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Adams M, Alderson R, Applebaum E, Li H, Li Y, Lima
Parmelee D, White J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bac 1 chemokine beta10 or monocyte chemotactic protein 4 variant. Human; chemokine beta10; Ck beta10; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4;
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23-FEB-1996; U02598.
23-FEB-1996; WO-U02598
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19-MAR-1998 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             leukaemia; MCP-4;
                                                                                                                                                                                                                                                                                                                                                             Local Similarity nes 11; Conser
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                                                                                                                                                                                                                                                                                                 56 eicadpkekwvq
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      used to isolate genes encoding similar peptides, in gene therapy d for chromosome identification.
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                                                                                                                          standard; peptide;
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                                                                                                                                                                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                                                                                                       67
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91.7%;
                                                                                                                                                                                                                                                                                                                                                                                  95.98;
91.78;
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1; N
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Pred. No. 1.28e-02;
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                                                                                                                                                                                                                                                                                                                                                                                     93; DB 27;
No. 1.28e-02;
        colony stimulating factor;
                                                                                                                                                                                                                                                                                                                                                 <u>,</u>
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Best Local Similarity
Matches 11; Conser
             N-PSDB; T17050.

New chemokine Ck(beta)-4 and -10 genes and polypeptide(s) - useful to treat, e.g. leukaemia, solid tumours and auto-immune diseases Claim 19; Fig 2; S3pp; English.

A novel human chemokine, Ck beta-10 (R93087), was identified as the product of a cDNA clone (T17050) isolated from a 9-wk early human tissue cDNA library. The protein is structurally related to the chemokine family. Recombinant Ck beta-10 can be obtd. by incorporating the cDNA into a vector and expression of the protein in e.g. E. coli, COS or Sf9 cells. Ck beta-10 can be used to treat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence represents a chemokine, CKbeta-10, which is capable of mobilising stem cells. The chemokine can be used therapeutically to improve stem cell mobilisation, optionally together with a colony stimulating factor or other haematoregulatory agent. It can be used wherever an increased level of haematopoietic cells is needed, e.g. to increase the immune response to chronic infection (particularly bacterial or parasitic), to promote wound healing, in (transplant) patients with reduced bone marrow function as a result of immunosuppressive treatment or disease, and to provide more rapid regeneration of bone marrow after treatment for neoplastic or viral diseases. The induced stem cells may be harvested for subsequent return to the patient, optionally after they have been genetically manipulated to deliver a colling and to provide the colling and the collin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chemokine beta-10; chemokine beta-4; Ck beta-10; Ck beta-
cytokine; leukaemia; tumour; cancer; autoimmune disease;
asthma; allergy; wound healing; diagnosis; therapy.
                                                                                                                                                                                                                                                                                     (HUMA-) HUMAN GENOME
Adams MD, L1 H;
WPI; 96-151145/15.
                                                                                                                                                                                                                                                                                                                                                              29-FEB-1996.
23-AUG-1994; U09484.
23-AUG-1994; W0-U09484.
08-SEP-1994; ZA-006936.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-AUG-1996 (first entry) Human chemokine beta-10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 T 26
R93087 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  to deliver a selected gene product (gene therapy). The cells co-administered with a cytotoxic drug. Sequence 82 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SMIK ) SMITHKLINE BEECHAM CORP. Kreider BL, Li H, Pelus L, Wh. WPI; 97-258956/23.
  in e.g. E. col
solid tumours,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               increase resistance to infection Claim 7; Page 11-12; 24pp; Engli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAY-1997.
23-OCT-1996; U16959.
24-OCT-1995; US-006051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                neoplastic disease; viral disease; gene therapy; cytotoxic drug.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           haematoregulator; immune response; bacterial infection; transplant; wound healing; bone marrow; immunosuppression; regeneration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9605856-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ten new chemokine(s) able to mobilise stem cells - used where increased levels of haematopoietic cells are required, e.g. to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          56 eicadpkekwvq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 EICADPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
  chronic infections,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /label= Sig_peptide
25..98
/label= Mat_protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95.9%;
91.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 93; DB 24;
Pred. No. 1.28e-02;
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  psoriasis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ck beta-4;
allergy,
                        to treat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ç
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THE SECOND SECON
                                                                                                          Query Match
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Thehas 11; Conserv
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                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 36-37; 47pp; English.

Chaim 1; Page 36-37; 47pp; English.

Chaim 1; Page 36-37; 47pp; English.

Chaim 2; Protein-5 (MCP-5), a novel C-C chemokine.

Componeyte chemotactic protein-5 (MCP-5), a novel C-C chemokine.

Claim 3; Page 3; Protein-5 (MCP-5), a novel C-C chemokine.

Claim 4; Page 3; Page 4; Page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
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Monocyte chemotactic protein 5; MCP-5; human; macrophage;
chemokine; inhibitor; antlinflammatory; atherosclerosis;
Crohn's disease; arthritis; anglogenesis; tumour; metastasis;
therapy; diagnosis; medical imaging.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            w30191 standard; Protein;
w30191;
21-MAY-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       to regulate haematopoiesis, promote angiogenesis. It can also be used colony forman during chemotherapy. Sequence 98 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ICOS-) ICOS CORP. Godiska R, Gray PW; WPI; 97-489645/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Polynucleotide encoding monocyte chemotactic protein-5 - useful in treatment of e.g. inflammation, atherosclerosis, angiogenesis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB; T90880.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-MAR-1997; U04898.
27-MAR-1996; US-622851.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Peptide
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                                                                                                                                                                                                                                                                                      Sequence
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                                                                                                                                                                                                                                                                                                                   MCP-5 agonists and antagonists.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72 eicadpkekwyg
                                                                 72 eicadpkekwyg 83
       H
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   EICADPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
11; Conser
                                                                                                                                                                                                                                                                                      86
                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /label= Sig_peptide
24..98
/label= Mat_protein
/note= "(Claim 4)"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95.9%;
91.7%;
                                                                                                                                                                               91.78;
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                                                                                                                                           Pred.
1; |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 93; DB 17;
Pred. No. 1.28e-02;
1; Mismatches 0
                                                                                                                                                                           Score 93; DB 28;
Pred. No. 1.28e-02;
                                                                                                                                           Mismatches
                                                                                                                                           0;
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                                                                                                                                                                                                         Length 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 98
                                                                                                                                           Indels
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                                                                                                                                           Gaps
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Best Local S
Matches 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Fig 2; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4), which can be used to treat patients deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10. Ck beta10 can be used to treat leukaemia, solid tumours, choric of opportunistic
                                                                                                                                                                                                                                                                                                                                                                                                                                                 IT 29
R06398 standard; protein; 99
R06398;
14-DEC-1990 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human chemokine betal0 or monocyte chemotactic protein 4. Human; chemokine betal0; Ck betal0; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody;
                                                                                                                         misc_difference
                                                                                                                                                                                                                                                                                         Key
                                                                                                                                                                                                                                                                                                                                                                     Human MCF precursor.

Monocyte chemotactic factor; antibacterial; antitumour; cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Polypeptide encoding of protein 4 - useful to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; T85029
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Adams M, Alderson R, Applebaum
Parmelee D, White J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9731098-A1.
28-AUG-1997.
23-FEB-1996; U02598.
23-FEB-1996; WO-U02598.
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19-MAR-1998
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    WO9007863-A.
26-JUL-1990.
                                                                                                                                                                                                                                                        protein
                                                                                                                                                                                                                                                                                                                               Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  leukaemia; MCP-4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          72 eicadpkekwvq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EICADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97-435153/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            h 95.9%;
Similarity 91.7%;
11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98 AA;
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24..98
/label= mat_peptide
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1..23
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                                                                                    /label=A or T
                                                                                                                                                                    /note="Claim 1"
                                                                                                                                                                                                         /label=mature
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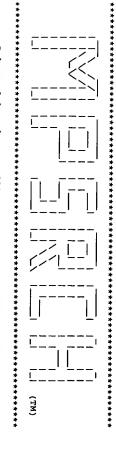
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The sequence was deduced from the DNA sequence determined from three recombinant plasmids, pHMCF7, pHMCF25 and pHMCF29 which were isolated from a cDNA library prepd. from RNA extracted from thuman promyelocytic leukaemia cell line, HL-60 (ATCC CCL-240). Control of the promyelocytic leukaemia cell line, HD-60 (ATCC CCL-240). The protein is therefore not determined and may be celher Ala or Thr. The protein may be produced by recombinant DNA techniques in E.coli, and is useful as a drug for treatment of certain bacterial infectons and cancers.
                                                                                                                                                                 Query Match
Best Local
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                                                                                                                                                                                                                                                     Claim 1; Page 3; 6pp; German.
Poly(A+)RNA from bull seminal vesicles was used to prepare a cDNA in the expression vector lambda gtll. 1.5 x 10(5) cDNA clones were screened with a polyclonal anti-P6 antiserum of monospecific immunoglobulin G and six positives were identified. The insert of a suitable cDNA clone, pH42, was cloned into pUC18 and sequenced. pH42 encodes the 11,114 Da precursor of P6. It is called Monocyte Chemoattractant (bMCP-1), which is a homologue of human (h)MCP-1. There is 72% overall AA sequence homology to hMCP-1 with the signal peptide showing 100% and the central region showing 89% homology. Sequence 76 AA;
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Sequence of bovine P6 protein.
Monocyte Chemoattractant; bovine P6-derivative; thrombosis; tumour; inflammation therapy.
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01-JAN-1989; JP-000065.
03-FEB-1999; JP-026438.
(USDC ) US SEC OF COMMERCE.
Furteni Y, Fukui T, Junichi Y, Masaaki Y, Matsushima
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         also for diagnosis
Claim 1; Page 3; 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Drug containing a bovine protein homologous treating inflammation, tumours, thrombosis,
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31-JUL-1991; 125251.
31-JUL-1991; DE-125251.
(SCHA-) SCHAPER & BRUEMMER GMBH & CO
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DE4125251-C.
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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Tabular output not generated. Run on: Thu Apr 1 07:24:12 1999; MasPar time 3.33 Seconds 134.969 Million cell updates/sec

Title:

Description: Perfect Score Sequence: Scoring table: Score: >US-08-927-939-1 (1-12) from US08927939.pep 97 1 EICADPKQKWVQ 12

PAM 150 Gap 15

Searched: 116738 seqs, 37463448 residues

Post-processing: Minimum Match 0% Listing first 100 summaries

Database:

pir58 1:pir1 2:pir2 3:pir3 4:pir4

Statistics: Mean 24.661; Variance 36.070; scale 0.684

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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#title Human monocyte chemoattractant protein-1 (MCP-1). Full-length cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE.
                                               #journal
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#journal Adv. Exp. Med. Biol. (1991) 305:47-56
#title Human monocyte chemoattractant protein-1 (MCP-1).
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The human homolog of the JE gene encodes a monocyte secretory
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                                                                                                     Bottazzi, B.; Colotta, F.; Sica, A.; Nobili, N.; Mantovani,
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                                               chemoattractant
chemoattractant expressed in human sarcoma cells (tumor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-1/monocyte chemotactic and
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#map_position 17q11.2-17q12
CLASSIFICATION #superfamily macrophage inflamm
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#journal Mol. Cell. Biochem. (1993) 126:61-68
#title The expression of monocyte chemotactic protein (MCP-1) in
#cross-references MUID:94150478
#accession 157488
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Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF).
#cross-references MUID:89165862
#accession A32300
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#title Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel **N-terminally processed form.**

**Cross-references MUID:90211336**
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#accession A32396
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##residues 1-99 ##label LIY
##cross-references GB:S69738; NID:g545464; PID:g545465
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##residues 29-33,'XX',36-52;82-92 ##label DEC
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                                                                                                                                                                                                                                                                                                                                                                                                                             Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F. Chinese J. Microbiol. Immunol. (1994) 14:29-32
The PCR, cloning and sequencing of human monocyte chemoattractant protein-1 (MCP-1) gene.
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24-28,'Q',30-99 ##label YEQ
#product monocyte chemoattractant protein 1, short form
#status experimental #label MAT2\,
#modified_site pyrrolidone carboxylic acid (Gln) (in
mature form) #status experimental\
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#product monocyte chemoattractant protein 1 #status
experimental #label MAT\
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#dutnors Wempe, F.; Henschen, A.; Scheit, K.H.
#journal DNA Cell Biol. (1991) 10:671-679
#title Gene expression and cDNA cloning identified a major basic protein constituent of bowine seminal plasma as bowine monocyte-chemoattractant protein-1 (MCP-1).
#cross-references MUID:92096117
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monocyte chemoattractant protein 1 precursor - bovine
monocyte chemotactic factor 1; seminal plasma protein P6
#formal_name Bos primigenius taurus #common_name cattle
03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change
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Porcine luteal cells express monocyte chemoattractant
protein-1 (MCP-1): Analysis by polymerase chain reaction
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##residues 50-68,'X',70-74,'X',76 ##label WE2
##experimental_source seminal vesicle
##experimental_source seminal vesicle
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##residues 1-99 ##label WEM
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Local Similarity 91.78;
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Local Similarity 91.7%;
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#superfamily macrophage inflammatory protein
#length 99 #molecular-weight ill14 #checksum
                                 J. Immunol. (1991) 146:3483-3488
Neutrophil attractant/Activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and expression in spleen cells.

ces MUID:91225489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein-1 gene. JC2336
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Biochem. Biophys. Res. Commun. (1994) 202:1272-1279
Characterization of the bovine monocyte chemoattrac
                   146857
                                                                                               Yoshimura, T.; Yuhki, N.
J. Immunol. (1991) 146:3483-3488
                                                                                                                                                                                    14-Feb-1997
                                                                                                                                                                                                                I46857 #type complete
monocyte chemoattractant protein-1 - rabbit
#formal_name Oryctolagus cuniculus #common_name domestic
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monocyte chemoattractant protein-1 - bovine
#formal name Bos primigenius indicus #common name zebu cattle
20 Feb-1995 #sequence_revision 20 Feb-1995 #text_change
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#title
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##cross-references GDB:138473; OMI
#map_position 17q11-17q12
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This protein induces proteinase secretion and chemo
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Molecular cloning of MCP-3: a human monocyte-derived monocyte chemoattractant protein.
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                                                                                                                                                                                       #superfamily macrophage inflammatory protein
cytokine; glycoprotein; inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Biochem. Biophys. Res. Commun. (1993) 191:535-542
Human monocyte chemotactic protein-3 (MCP-3): Molecular
Cloning of the cDNA and comparison with other chemokines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Opdenakker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; Laureys, G.; Van Damme, J. Genomics (1994) 21:403-408
The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome 17g11.2-q12.
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                                                                                                                                                                                                                                                      #authors Yoshimura, T.
#journal J. Immunol. (1993) 150:5025-5032
#title cDNA cloning of guinea pig monocyte chemoattractant protein-1
#cross-references MUID:93267104
#cross-references MUID:93267104
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#residues 1-99 ##label HOS
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##CONTION #superfamily macrophage inflammatory protein
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##cross-references GB:L04985;
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Porcine luteal cells express monocyte chemoattractant
protein-2 (MCP-2): Analysis by cDNA cloning and northern
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monocyte chemoattractant protein-2 - pig
#formal_name Sus scrofa domestica #common.r
24-Feb-1995 #sequence_revision 24-Feb-1995
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monocyte chemoattractant protein-1 - guinea pig
#formal_name Cavia porceilus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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#molecular-weight 13741 #check
                                                         Score 88; DB 2; I
Pred. No. 1.37e-06;
1; Mismatches 1
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##residues 1-9
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This protein has eosinophil specific chemotatic activity.
FICATION #superfamily macrophage inflammatory protein
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Local Similarity 75.0%;
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This protein is a polymorphonuclear leukocyles chemotactic factor and is involved in the host defense function.
JC2478 #type complete eotaxin - rat eotaxin - rat #formal_name Rattus norvegicus #common_name Norway rat
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Cloning of a canine gene homologous
interleukin-8-encoding gene.
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interleukin-8 - dog
#formal_name Canis lupus familiaris #common_name
19-May-1994 #sequence_revision 19-May-1994 #text
12-Apr-1995
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                                                                                                                                                                                                                                          #superfamily beta-thromboglobulin
#length 95 #molecular-weight 10611 #checksum
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Suzuki, K.
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#product eotaxin #status predicted #label MAT
yth 97 #molecular-weight 10790 #checksum 448
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Pred. No. 1.03e-05
2; Mismatches
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Pred. No. 3.77e-06;
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 #authors
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##residues 1-96 ##label JOS
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##cross-references EMBL:X77603; NID:g602551; PID:g602552
WI This protein is identified as a potent eosinophil chemoattractant.
FFICATION #superfamily macrophage inflammatory protein
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                                                               interleukin-8 - sheep
#formal_name Ovis sp. #common_name sheep
21-Feb-1997 #sequence_revision 21-Feb-1997
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llarity 90.9%;
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J. Exp. Med. (1995) 181:1211-1216
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#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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Eotaxin: Cloning of an eosinophil chemoattractant cytokine and increased mRNA expression in allergen-challenged
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#title Cloning, sequencing, expression and inflammatory activity in
skin of ovine interleukin-8.
#cross-references_MUID:95137691
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[FICATION #superfamily beta-thromboglobulin
#Y #length 101 #molecular-weight 11292 #checksum
##residues 1-103 ##label LIN
##cross-references GB:M86923; NID:g164520; PID:g164521
#FICATION #superfamily beta-thromboglobulin
                                   ##molecule_type mRNA
##residues 1-10
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##mollecule_type mRNA
##residues 1-101 ##label SEO
##cross-references GB:S74436; NID:g786590; PID:g786591
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                                                                                                 Lin, G.; Pearson, A.E.; Scamurra, R.W.; Zhou, Y.; Baarsch, M.J.; Weiss, D.J.; Murtaugh, M.P.
J. Biol. Chem. (1994) 269:77-85
Regulation of interleukin-8 expression in porcine alveolar macrophages by bacterial lipopolysaccharide.
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06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
08-Sep-1997
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interleukin 8 - sheep
#formal_name Ovis orientalis aries,
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#formal_name Sus scrofa domestica #common_name domestic pig
02-Jun-1995 #sequence_revision 02-Jun-1995 #text_change
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Pred. No. 1.03e-05;
2; Mismatches 1
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*title Molecular cloning of porcine alveolar macrophage-derived neutrophil chemotactic factors I and II; identification of porcine II-8 and another intercrine-alpha protein. #cross-references MUID:93041741

*accession A44253
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#accession I52322
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##cross-references ExBL:022414; NID:g790632; PID:g790633
#FICATION #superfamily macrophage inflammatory protein
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Similarity 75.0%;
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macrophage inflammatory protein-lalpha - rat
#formal_name Rattus norvegicus #common_name Norway rat
29-May-1998 #sequence_revision 29-May-1998 #text_change
02-Jul-1998
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alveolar macrophage chemotactic factor-I (AMCF-I)
interleukin-8 homolog - pig
#formal_name Sus scrofa domestica #common_name domestic pig
30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change
                                                                                                                                                                                                                                                                        Shi, M.M.; Godleski, J.J.; Paulauskis, J.D.
Biochem. Biophys. Res. Commun. (1995) 211:289-295
Molecular cloning and posttranscriptional regulation of
macrophage inflammatory protein-1 alpha in alveolar
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#superfamily beta-thromboglobulin
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                                Score 83; DB 2; 1
Pred. No. 1.69e-05;
2; Mismatches :
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Pred. No. 1.03e-05
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                                                                                                              **residues 1-101 ##label YOS
##cross-references GB:M57439; NID:g165552; PID:g165553
!*NCE $13052
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##cross-references GB:Y10802; NID:g1924937; PID:e294088; PID:g1924938
##experimental_source bone marrow
This protein belongs to the beta-chemokine family which is one of
the major HIV-suppressive factors. It plays roles in autoinmune
processes such as multiple sclerosis and rheumatoid arthritis ar
in tumor biology, and contribute to the trafficking and
                                                                                                                                                                             ##molecule_type mRNA
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Similarity 66.7%;
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P.; Van Aelst, I.; Van Damme, J.; Opdenakker, G.
Biochem. Biophys. Res. Commun. (1997) 231:726-730
Human monocyte chemotactic protein-2: cDNA cloning and
regulated expression of mRNA in mesenchymal cells.
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monocyte chemotactic protein-2 - human
#formal_name Homo sapiens #common_name man
02-May-1997 #sequence_revision 18-Jul-1997
31-Oct-1997
                                    Beaubien, B.C.; Collins, P.D.; Jose, P.J.; Totty, N. Hsuan, J.; Waterfield, M.D.; Williams, T.J. Biochem. J. (1990) 271:797-801
A novel neutrophil chemoattractant generated during
                                                                                                                                                                                                                                  J. Immunol. (1991) 146:3483-3488

Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and their expression in spleen cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       interleukin-8 - rabbit
neutrophil attractant/activation protein-1
#formal_name Oryctolagus cuniculus #common
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vivo. Purification, partial amino acid sequence and
                    inflammatory reaction in the rabbit peritoneal cavity
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jth 99 #molecular-weight 11246 #checksum 6596
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Best Local
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##molooper Proc. Natl. Acad. Sci. U.S.A. (1988) 85:3738-3742

U.S.A. (1988) 85:3738-3742

#title Cloning and expression of JE, a gene inducible by plattelet-derived growth factor and whose product #cross-references MUID:88234501
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ##molecule_type DNA; mRNA
##residues 1-148 ##label
##cross-references GB:J04467;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ##residues 1-148 ##label
##cross-references GB:M19681;
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                                                                                                                                                                                                                                                                          h 82.5%;
Similarity 75.0%;
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                                A32393 #type complete
macrophage inflammatory protein-1-alpha precursor - mouse
heparin-binding chemotaxis protein; L2G25B protein;
SCI/MIP-la; SIS alpha; stem cell inhibitor/macrophage
inflammatory protein 1-alpha; T-cell activation protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kawahara, R.S.; Deuel, T.F.
J. Biol. Chem. (1989) 264:679-682
Platelet-derived growth factor-inducible gene JE is a member of a family of small inducible genes related to platelet
                                                                                                                                                                                                                                                                                                                             #binding_site carbohydrate (Asn) (covalent) #status
predicted
#length 148 #molecular-weight 16326 #checksum 5278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          factor 4.
A44771
                                                                                                                                                                                                                                                                                                                                                                                                      #superfamily macrophage inflammatory protein
cytokine; glycoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PDGF-inducible JE glycoprotein precursor - mouse #formal_name Mus musculus #common_name house mouse 01-Dec-1989 #sequence_revision 01-Dec-1989 #text_change
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#formal_name Mus musculus #common_name
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23-33,'X',35,'X',37-46,'X',48-49,'I',51-53 ##label BEA
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75.0%;
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Pred. No. 4.55e-05;
2; Mismatches 1
                                                                                                                                                                                                                                                         Score 80; DB 2; I
Pred. No. 7.44e-05;
1; Mismatches 2
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; NID:g193488; /
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NID:g193486; PID:g387168; GB:M19682
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                                                                                                                                                                                                                                                                                           Length 148;
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#title Sequence of the murine haemopoletic stem cell
inhibitor/macrophage inflammatory protein 1-alpha gene.
#cross references MUID:91016858
#accession S11685
                                                                                 #journal .#title
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #journal
#contents
#title Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta. #cross-references_MUID:89067830
                                                                                                                                                                                                                                                                                                                               #authors Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
#journal J. Immunol. (1989) 142:679-684

A family of small inducible proteins secreted by leukocytes
are members of a new superfamily that includes leukocyte
and fibroblast-derived inflammatory agents, growth factors,
and indicators of various activation processes.

#cross-references_MUID:89093958
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#title Cloning and characterization of a cDNA for murine macrophage
inflammatory protein (MIP), a novel monokine with
inflammatory and chemokinetic properties.
#cross-references_MUID:88258380
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##cross-references EMBL:X53372; NID:g54062; PID:g297531
##note the authors' translation of the nucleotide sequence
##note differs at several positions from the sequence give
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                                                                                                                                                                                                                                                                              ##molecule_type mRNA
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Davatelis, G.; Tekamp-Olson, P.; w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kwon, B.S.; Weissman, S.M.
Proc. Natl. Acad. Sci. U.S.A. (1989) 86:1963-1967
CDNA sequence of two inducible T-cell genes.
                                                                                                                                                  Sherry, B.; Tekamp-Olson, P.;
Davatelis, G.; Wolpe, S.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        J. Exp. Med. (1989) 170:2189 erratum
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Luedke, C.; Gallegos,
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                                                                                                      J. Exp. Med. (1988) 168:2251-2259
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                                                                                                                                                  Gallegos, C.;
Masiarz, F.;
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                                                                                                                                                  Coit,
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Coit, D.; C
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Best Local Similarity 66.7%;
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#journal
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#title Macrophages secrete a novel heparin-binding protein with first and the secret of the
#cross-references
                                                                                                                                                                #authors
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#accession S07723
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##residues 24-33,'
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#formal_name Rattus norvegicus #common_name Norway rat
29-Jan-1993 #sequence_revision 29-Jan-1993 #text_change
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                            Yoshimura, T.; Takeya, M.; Takahashi, K.
Biochem. Biophys. Res. Commun. (1991) 174:504-509
Molecular cloning of rat monocyte chemoattractant protein-1
(MCP-1) and its expression in rat spleen cells and tumor
cell lines.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Timmers, H.T.M.; Pronk, G.J.; Bos, J.L.; van der Eb, A. Nucleic Acids Res. (1990) 18:23-34
Analysis of the rat JE gene promoter identifies an Ap-1 binding site essential for basal expression but not f
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MUID:91128376
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#product macrophage informatory
experimental #label MAT
gth 92 #molecular-weight 10345 #
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4-39-Thr were also found
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Pred. No. 5.18e-04;
3; Mismatches 1
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Best Local Similarity 58.3%;
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#journal Science (1993) 261:600-603

#title Signal sequence trap: a cloning strategy for 
#cross-references MUID:93342488
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##molecule_type mRNA
##residues 1-89 ##label NAG
##cross-references GB:D21072; NID:g413905; PID:d1005177; PID:g468457
                                                                                                                                                                                                                                                                                                                      ##status preliminary; translated from GB/EMBL/DDBJ
##molecule_type mRNA
##residues 1-89 ##label RES
##cross-references GB:L12029; NID:g393179; PID:g393180
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##croos-references GB.M57441; NID:g205333; PID:g205334
##experimental_source spleen cells
the authors translated the codon GAA for residue 62
##note
Lys and GCT for residue 63 as Leu
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Local Similarity 75.0%;
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pre-B-cell growth-stimulating factor precursor - mouse
#formal_name Mus musculus #common_name house mouse
02-Jun-1994 #sequence_revision 02-Jun-1994 #text_change
10-Sep-1997
153416 #type complete
interleukin-8 homolog - mouse
#formal_name Mus sp. #common_name mouse
02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change
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Best Local Similarity 58.3%;
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                                                          #journal Science (1993) 261:600-603
#title Signal sequence trap: a cloning strategy
#cross-references MUID:93342488
#accession I81182
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#title Molecular cloning of TPARI, a gene whose expression is repressed by the tumor promoter 12-0-tetradecanoylphorbol 13-acetate (TPA).
#cross-references MUII:95073497
#accession I53416
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##cross-references EMBL:U16752; NID:91272194; F
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##molecule_type mRNA
##residues 1-89 ##label RES
##cross-references GB:S74318; NID:g78639
##residues 1-93 ##label RES
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Local Similarity 58.3%;
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cytokine SDF-1-beta - human
#formal_name Homo sapiens #common_name man
21_Dec-1996 #sequence_revision 06-Jun-1997
17-Jul-1998
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#formal_name Mus musculus #common_name house mouse
02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change
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Pred. No. 8.37e-04
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Pred. No. 8.37e-04;
3; Mismatches 2
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NID:g393181; PID:g393182
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#title
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #authors Mukaida, N.; Shiroo, M.; Matsushima, K.
#journal J. Immunol. (1989) 143:1366-1371
#title Genomic structure of the human monocyte-derived neutrophil
chemotactic factor IL-8.
#cross-references MUID:89309826
#accession A37034
                                                                   *Submission
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#cross-references MUID:89313739
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##cross references GB:M26383; NID:g188627; PID:g188628
NICE 537634
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                                                                                                                                                                                      ##molecule_type mRNA
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##note the sequence shows similarity to several
platelet-derived factors, a v-src-induced protein, a
growth-regulated gene product (gro), and an
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##note the authors failed to translate the last thirty-six
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interleukin-8 precursor - human
beta-thromboglobulin-like protein; fibroblast-derived
beta-thromboglobulin-like protein; fibroblast-derived
neutrophil-activating factor alpha; lung carcinoma-derived
chemotaxin; lymphocyte-derived neutrophil-activating
factor; monocyte-derived neutrophil chemotactic factor;
monocyte-derived neutrophil-activating factor
#formal_name Homo sapiens #common_name man
08-Dec-1992 #sequence_revision 08-Dec-1992 #text_change
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J. Exp. Med. (1988) 167:1883-1893

Molecular cloning of a human monocyte-derived neutrophil chemotactic factor (MDNCF) and the induction of MDNCF mRNA by interleukin 1 and tumor necrosis factor.
                                             King, C.H.; Gordon, G.S.; Konieczkov submitted to the EMBL Data Library, $37634
                                                                                                                                                                                                                                                                         Kowalski, J.; Denhardt, D.T.
Mol. Cell. Biol. (1989) 9:1946-1957
Regulation of the mRNA for monocyte-derived
neutrophil-activating peptide in differentiating HL60
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Pred. No. 8.37e-04;
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Appella, E.; Oppenheim, J.J.; Leonard, E.J.

#journal Proc. Natl. Acad. Sci. U.S.A. (1987) 84:9233-9237

#title Purification of a human monocyte-derived neutrophil chemotactic factor that has peptide sequence similarity to other host defense cytokines.
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#accession A27488
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SNCE PL0107
                                                                                                           ##molecule_type protein
##residues 23-33,'X',35,'X',37-42 ##label VAN
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##residues 23-32 ##label SCH
##experimental_source dermal fibroblasts
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##residues 28-59 ##label WAL
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##residues 28-69 ##label YOS
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J. Immunol. (1990) 144:2223-2232
IL-lalpha or tumor necrosis factor-alpha stimulate release three NAP-1/IL-8-related neutrophil chemotactic proteins human dermal fibroblasts.
Nakagawa, H.; Hatakeyama, S.; Ikesue, A.; Miyai, H.
FEBS Lett. (1991) 282:412-414
Generation of Interleukin-8 by plasmin from
AVLPR-interleukin-8, the human fibroblast-derived
                                                                                                                                                                                                                              Van Damme, J.; Decock, B.; Conings, R.; Lenaerts, J.P.;
Opdenakker, G.; Billiau, A.
Eur. J. Immunol. (1989) 19:1189-1194
The chemotactic activity for granulocytes produced by virally infected fibroblasts is identical to monocyte-derived
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##molecule_type protein
21-33,'X',35,'X',37-47 ##label YO2
##residues 21, 23, and
the forms starting from positions 21, 23, and
represented 8%, 47%, and 45%, respectively,
interleukin-8
                                          #journal Immunol Lett. (1990) 24:165-170
#title Coding region structure of interleukin-8 gene of human lung
giant cell carcinoma LU65C cells that produce
LUCT/interllukin-8: homogeneity in interleuki-8 genes.
#cross-references MUID:90346419
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Biochem. J. (1991) 275:581-584
#title Formation of neutrophil-activating peptide 2 from
platelet-derived connective-tissue-activating pu
by different tissue proteinases.
#cross-references MUID:91248085
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##residues 28-47 ##label VA3
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##residues 21-67 ##label VA2
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  of annotations omitted.
                                                                                                                                                                                                                                                                                                                    Golds, E.E.; Mason, P.; Nyirkos, P. Biochem. J. (1989) 259:585-588 Inflammatory cytokines induce synthesis and secretion protein and a neutrophil chemotactic factor but not beta-2--microglobulin in human synovial cells and fibroblasts.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Van Damme, J.; Van Beeumen, J.; Opdenakker, G.; Billiau, A. J. Exp. Med. (1988) 167:1364-1376
A novel, NH-2-terminal sequence-characterized human monokine possessing neutrophil chemotactic, skin-reactive, and granulocytosis-promoting activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Showalter, S.D.; Skeel, A.; Leonard, E.J.
Mol. Immunol. (1989) 26:87-93
Three forms of monocyte-derived neutrophil chemotactic
(MDNCF) distinguished by different lengths of the
amino-terminal sequence.
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Purification of granulocyte chemotactic peptide/interleukin-8 reveals N-terminal sequence heterogeneity similar to that
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Leonard, E.J.
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Query Match Best Local Similarity

77.3%;

Score 75; Pred. No.

DB 2; I 8.37e-04;

Length 99;

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Best Local Similarity 66.7%;
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                                                           #cross-references MUID:92289805
#accession A46539
                                                                                                                                                                                                                                                                                         #journal J. Immunol. (1994) 152:1182-1189
#title Cloning, genomic organization, and chromosomal loc
of the Scya5 gene encoding the murine chemokine
#cross-references_MUID:94132613
                                                                                                                                                                                                                                                                              #accession
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#cross-references MUID:94065176
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                                                                                                                                                                                                                                   **sudeus preliminary; translated from GB/EMBL/DDBJ
##molecule_type DNA
##roat4...-
            ##residues 1-18,'A',20-91 ##label SCH
##experimental_source macrophage cell line PU5-1
                                                                                                                                                                                                        ##residues 1-91 ##label DAN
##cross-references EMBL:U02298; NID:g460090;
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monocyte chemoattractant cytokine RANTES precursor -
MuRantes
                                                                                                                   Schall, T.J.; Simpson, N.J.; Mak, J.Y.
Eur. J. Immunol. (1992) 22:1477-1481
Molecular cloning and expression of the murine RANTES
cytokine: structural and functional conservation bet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAP-1
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Neutrophi attractant protein-1 - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02_Jul-1996_#sequence_revision 02-Jul-1996 #text_change
                                                                                                                                                                                                                                                                              148875
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J. Immunol. (1993) 151:6225-6236
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sequence extracted from
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Pred. No. 8.37e-04;
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Ecst Local Similarity 58.3%;
Matches 7; Conservative
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#journal Kidney Int. (1992) 41:220-225

#title Isolation and characterization of cDNA from renal tubular epithelium encoding murine Rantes: A small intercrine from the Scy superfamily.

#cross-references MUID:92277990

#accession 156970
                                                                                       Query Match
Best Local
                                                                    Matches
                                                                                                                                                                                                                                                                       #authors Sporn, S.A.; Eierman, D.F.; Johnson, C.E.; Morris, J.;

Martin, G.; Ladner, M.; Haskill, S.

#journal J. Immunol. (1990) 144:4434-4441

#title Monocyte adherence results in selective induction of novel genes sharing homology with mediators of inflammation and tissue repair.

#cross-references MUID:90257367

#accession C60407
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#title Definition of a lipopolysaccharide-responsive element in the 5'-flanking regions of MuRantes and crg-2.
#cross-references_MUID:94217689
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                                                                                                                                                   ##molecule_type mRNA
##residues 1-50 ##label SPO
IFICATION #superfamily macrophage inflammatory protein
RY #length 50 #checksum 9927
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##residues 1-40,'E',42-91 ##label NEI
##cross references GB:M/7747; NID:g200649; PID:g200650
##cross references GB:M/7747 monocytes but not neutrophils is
immediate-early response protein to LPS stimulation.
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                                                                                     Match 74.2%;
Local Similarity 58.3%;
30 QVCADPSESWVQ 41 ::|||| : |||
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#status predicted #label MAT
#length 91 #molecular-weight 10071 #checksum 3010
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                                                             Score 72; DB 2; I
Pred. No. 3.47e-03;
3; Mismatches 2
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QY 1 EICADPKQKWVQ 12

Search completed: Thu Apr 1 07:24:36 1999 Job time: 24 secs.

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SUMMARIES

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MEDLINE;
ROLLINS B
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01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOTACTIC AND ACTIVATING FACTOR) (MCAF) (MONOCYTE SECRETORY PROTEIN JE)
(MONOCYTE CHEMOATTRACTANT PROTEIN 1) (HCll) (SMALL INDUCIBLE CYTOKINE
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SHYY Y.J.,
                                                MEDLINE; 90
DECOCK B.,
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                                                                                                                                                     SEQUENCE OF 24-99.
MEDLINE; 89184525.
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LI Y.S., SHYY Y.J.,
KOLATTUKUDY P.E.;
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CHANG H.C., HSU F.
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MEDLINE; 89153605.
YOSHIMURA T., YUHKI N.,
LEONARD E.J.;
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LARSEN C.G., OPPENHEIM
BIOCHEM. BIOPHYS. RES.
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EUKARYOTA; METAZOA; CHORDATA;
EUTHERIA; PRIMATES.
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   STRUCTURE MODELLING
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1:388-399(1989).
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9:4687-4695(1989)
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ES. COMMUN. 169:346-351(1990).
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J.J., MATSUSHIMA K.;
.COMMUN. 159:249-255(1989).
                               LENAERTS J.-P., BILIAU A., VAN DAMME COMMUN. 167:904-909(1990).
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ENV_HV1SC
ENV_HV1KB
CLH_RAT
                                                                                                      ., LEONARD E.J., TANAK
APPELLA E.;
.A. 86:1850-1854(1989)
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GRONENBORN A.M., CLORE G.M.;
PROTEIN ENG. 4:263-269(1991).
[11]
                                                                                                                                                                                                                                                                                                    EMBL;
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FEBS LETT. 395:277-282(1996).
-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND BASOPHILS
BUT NOT NEUTROPHILS OR EOSINOPHILS. AUGMENTS MONOCYTE ANTI-TUMOR
ACTIVITY. HAS BEEN IMPLICATED IN THE PARTHOGENESIS OF DISEASES.
CHARACTERIZED BY MONOCYTIC INFILTRATES, LIKE PSORIASIS, RHEUMATOID
ARTHRITIS OR ATHEROSCLEROSIS. MAY BE INVOLVED IN THE RECRUITMENT
OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF
                                                                                                        CHAIN
                                                                                                                                                                                                                                                                                     EMBL;
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ZHANG Y.J., RUTLEDGE B.J., ROLLINS B.J.;
J. BIOL. CHEM. 269:15918-15924(1994).
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MEDLLNE; 96234959.
HANDEL T.M., DOMAILLE P.J.;
BIOCHEMISTRY 35:6569-6584(1996).
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MEDLINE; 97143315.
LUBKOWSKI J., BUJACZ G., DOMAILLE P.J.,
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MEDLINE; 97053697
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.

PTM: PROCESSING AT THE N-TERMINIS CAN REGULATE RECEPTOR AND TARGET CELL SELECTIVITY. DELETION OF THE AMINO- TERMINAL RESIDUE CONVERTS IT FROM AN ACTIVATOR OF BASOPHIL TO AN EOSINOPHIL CHEMOATTRACTANT.

SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                            A35474;
S03339;
IDOK; 12
IDOL; 12
                                                                                                                                                                                                                                                                                   M31626 G386961;
M31625 G386961;
M31625 G386961;
M24545 G307163;
M424545 G307163;
M424768 G34514;
M37719 G487124;
M37719 G487124;
M32725 G338007;
M38223 G338007;
M28224 G338007;
M28224 G338007;
M28224 G338007;
M28234 G338007;
M28334 G348688;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATHEROSCLEROSIS
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                                                                                                                                                     PS00472;
                                                                                                                                     CHEMOTAXIS;
                                                                                                                                                                                                            12-MAR-97.
12-MAR-97.
14-OCT-96.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             UGUCCIONI M., BAGGIO
ED. 183:681-685(1996)
                                                                                                                                                                                                                                                       A35474.
S03339.
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                                                                                                                                    SMALL_CYTOKINES_CC; 1.
XIS; SIGNAL; INFLAMMATORY RESPONSE; 3D-STRUCTURE.
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A -> T.
MISSING:
MISSING:
                                             POTENTIAL
                                                                                          MONOCYTE CHEMOTACTIC PROTEIN 1. PYRROLIDONE CARBOXYLIC ACID.
 SSOT
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 ACTIVITY.
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RESULT 3
ID MCP1_PIG
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                                                                                                                                                                                                                                 KUMARA, G., BALLANTYNE C.M., MICHAEL L.H., KUKIELKA G.L., YOUKER K.A.,

& LINDSEY M.L., HAWKINS H.K., BIRDSALL H.H., MACKAY C.R., LAROSA G.J.,

& ROSSEN R.D., SMITH C.W., ENTMAN M.L.;

& CIRCULATION 95:693-700(1997).

C: -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT

C: NEUTROPHILS. IMPORTANT FACTOR IN THE COURSE OF THE INFLAMMATORY

C: REACTION TO REPERFUSION OF THE PREVIOUSLY ISCHEMIC MYCCARDIUM.

C: MAY PLAY A SIGNIFICANT ROLE IN MONOCYTE TRAFFICKING INTO THE

C: -!- SUBUNIT: MONOWER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).

C: -!- TISSUE SPECIFICITY: ENDOTHELIUM OF SMALL VEINS AND INTRAFASCICULAR

VEINS, AND INFILTRATING LEUKOCYTES.

C: -SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 1
                                                                                          Query Match
Best Local
                                                                                  Matches
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01-OCT-1996 (REL. 3
01-OCT-1996 (REL. 3
15-JUL-1998 (REL. 3
                                                                                                                       DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOATTRACTANT PROTEIN-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MUTAGEN
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                                                                                                                                                                                                                   EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                              EUTHERIA; CARNIVORA
                                                                                                                                                                                                                                                                                                                                                                                                                                      CANIS FAMILIARIS (DOG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCYA2 OR MCP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MCP1_
                                                             73 EICADPKQKWVQ
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                                                                                                                                                                                                                             C-C)
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                                       EICADPKQKWVQ
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Similarity 100.0%;
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                                                                                                                                                                                                                   (CHEMOKINE CC).
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larity 100.0%;
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STANDARD;
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XIS; SIGNAL; INFLAMMATO
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MISSING: 83% REDUCTION IN AC
D-A: 90% REDUCTION IN AC
N-A: 50% REDUCTION IN AC
R->F: 95% REDUCTION IN AC
S->Q: 40% REDUCTION IN AC
Y-D: LOSS OF ACTIVITY.
R->L: 90% REDUCTION IN AC
                                                                               Pred.
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0; 1
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                                                                                                                       BY SIMILARITY.
BY SIMILARITY.
; A7075B14 CRC32;
                                                                                                                                                    PYRROLIDONE CARBOXYLIC SIMILARITY).
                                                                                                                                                                         INFLAMMATORY RESPONSE.
BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                      VERTEBRATA;
PRT;
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                                                                                Mismatches
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2.70e-10;
-hes 0;
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----hes 0;
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Best Local S
Matches 1
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SEQUENCE FROM N.A.
MEDLINE; 94183284.
HOSANG K., KNOKE I., KLA
HOSANG K. BTOPHYS. RES. C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            P42831;
01-NOV-1995 (REL. 3
01-NOV-1995 (REL. 3
15-JUL-1998 (REL. 3
                       PROSITE; I
                              -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY C--C) (CHEMOKINE CC).
EMBL; S67954; E118856; -.
EMBL; S67956; G54497; -.
EMBL; S6795; G54497; -.
                                                                                                                                                                                        BOS TAURUS (
                                                                                                                                                                                                                             MCP2_BOVIN STANDARD; PRT; 99 AA.

Q09141;
01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
DISULFID
SEQUENCE
SIGNAL
CHAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZACH O.R.F.;
SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA
SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA
-I- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS
                                                                                                 WEMPE F. HANES J., SCHEIT K.H.;
DNA CELL BIOL. 13:1-8(1994).
-i-FUNCTION: CHEMOTACTIC FACTOR
CAN BIND HEPARIN.
                                                                                                                                            SEQUENCE FROM N.A. MEDLINE; 94114084.
                                                                                                                                                                                                                          CHEMOATTRACTANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -!- SUBUNIT: MONOMER OR
-!- SIMILARITY: BELONGS
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUS SCROFA (PIG)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-NOV-1995 (REL. 32,
01-NOV-1995 (REL. 32,
15-JUL-1998 (REL. 36,
MONOCYTE CHEMOTACTIC F
                                                                                                                                                                            EUTHERIA;
                                                                                                                                                                                                               SCYA8 OR MCP2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CYTOKINE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                73 EICAEPKQKWVQ
                                                                                                                                                                                                                                                                                                                                   1 EICADPKOKWVO 12
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X79416; G872313; -.
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: CHEMOTAXIS;
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                                                                                                                                                                               ARTIODACTYLA
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                                                                                                                                                                                                 (BOVINE).
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35
AA;
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                                                                                                                                                                                                                                                                                                                                                           84
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XIS; SIGNAL; INFLAMMATORY RESPONSE.
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10976
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                                                                                                                                                                                        CHORDATA; VERTEBRATA;
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99
24
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99
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, LAST SEQUENCE UPDATE)
, LAST ANNOTATION UPDATE)
PROTEIN 1 PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KLAUDINY J., WEMPE F., WUTTKE W., s. COMMUN. 199:962-968(1994).
                      SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                              ₹
                                                                                                             FACTOR THAT
                                                                                                                                                                                                                                                                                                                                                                              Score 96; DB 1; I
Pred. No. 4.91e-10;
1; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                            SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
ECC3AFB4 CRC32
HEPARIN-BINDING; INFLAMMATOR BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PYRROLIDONE CARBOXYLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN
                                                                                                             ATTRACTS
                                                                                                                                                                                                                                                                                                                                                                                                                              CRC32;
                                                                                                                                                                                         TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                  0
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MONOCYTES,
                                                                                                           MONOCYTES.
                       INFLAMMATORY RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACID
                                                                                       SIMILARITY).
                                                                            (SMALL CYTOKINE
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(BY
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Best Local :
                                                                                                                                                 DANTE M., GIBSON A.;

SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES,

BASOPHILS AND EOSINOPHILS, BUT NOT NEUTROPHILS. SIGNALS THROUGH

CCR2B AND CCR3 RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF

CCR2B AND CCR3 RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF

LEUKOCYTES AT BOTH SIDES OF ALLERGIC AND NONALLERGIC INTELAMMATION.

MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL

WALL DURING THE DISEASE PROCESS OF ARTHEROSCLEROSIS. MAY PLAY A

ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO

EXOGENOUS PATHOGENS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                           MEDLINE; 97341179.

BERKHOUT T.A., SARAU H.M., MOORES K., WHITE J.R., ELSHOURBAGY N., APPELBAUM E., REAPE T.J., BRAWNER M., MAKWANA J., FOLEY J.J., SCHMIDT D.B., IMBURGIA C., MACNULTY D., MATTHEWS J., O'DONNELL K. O'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPHEE C.; J. BIOL. CHEM. 272:16404-16413(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GARCIA-ZEPEDA E.A., COMBADIERE C., LAVIGNE F., HAMID Q., MURPHY P.M., J. IMMUNOL. 157:5613-5626(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 4 PRECURSOR (MCP-4) (MONOCYTE CHEMOATTRACTANT PROTEIN 4) (CK-BETA10) (NCC-1).
SCYAL3 OR MCP4 OR NCC1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      UGUCCIONI M., LOETSCHER P., FORSS:
LI Y., KREIDER B., GAROTTA G., TH
J. EXP. MED. 183:2379-2384(1996).
-!- MASS SPECTROMETRY: MW=9314; MW_ERR=30; METHOD=MALDI; RAN-1!- MASS SPECTROMETRY: MW=8760; MW_ERR=30; METHOD=MALDI; RAN-1!- MASS SPECTROMETRY: MW=8575; MW_ERR=30; METHOD=MALDI; RAN-1!- INDUCTION: BY INTERLEUKIN-1 AND TNF-ALPHA.
-!- TISSUE SPECIFICITY: WIDELY EXPRESSED, FOUND IN SMALL INTITIVENT COLON, LUNG, TRACHEAR, STOMACH AND LYMPH NODE. LOISEN IN THE PULMONARY ARTERY SMOOTH MUSCLE CELLS.
-!- THIS PROTEIN CAN BIND HEPARIN.
-!- PTM: ONE MAJOR ISOFORM MCP-4, AND TWO MINOR ISOFORMS (LA (FNPQGIA)MCP-4 ARE PRODUCED BY DIFFERENTIAL SIGNAL CLEAV) (LA)MCP-4 IS ABOUT 30 FOLD LESS ACTIVE THAN MCP-4.
                                                                                       + + + + + +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q99616;
15-JUL-1998
                                 ++
                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-FETAL;
                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 96235049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 97113354.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-HEART
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EUTHERIA; PRIMATES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HOMO SAPIENS (HUMAN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MCP4_HUMAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10900
                                                                                                                                                                                                                                                                                                                                                                                                                              AND SEQUENCE OF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AND SEQUENCE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHORDATA; VERTEBRATA; TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    59
75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FORSSMANN
G., THELEN
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Pred.
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BY SIMILARITY.
BY SIMILARITY.
9BA2CD26 CRC32;
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No. 1.61e-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ROTHENBERG M
LUSTER A.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                              22-33.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEWALD B.,
BAGGIOLINI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 M.E.,
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  ISOFORMS (LA)MCP-4 AND SIGNAL CLEAVAGE. MCP-4.
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                                                                       INTESTINE,
                                                                                                                              RANGE-17-98.
RANGE-22-98.
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P28291;
01-DEC-1992 (REL. 24, CREATED)
1 01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
1 01-DCC-1995 (REL. 32, LAST ANNOTATION UPDATE)
2 MONOCYTE CHEMOTACTIC PROTEIN 1A PRECURSOR (MC. 25 SEMINAL FLUID PROTEIN).
2 SEMINAL FLUID PROTEIN).
3 BOS TAURUS (BOVINE).
3 CHORDATA; METAZOA; CHORDATA; VERTEBRATA; TETOCC EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
Query Match
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                                                      DISULFID
DISULFID
SEQUENCE
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DISULFID
DISULFID
CARBOHYD
SEQUENCE
                                                                                                                                                                                                                                                                                                 EMBL;
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EMBL; AC002482; G2340091;
MIM; 601391; --
                                                                                                                                                  CHAIN
                                                                                                                                                                                                                                                              PIR;
                                                                                                                                                                                                                                                                                                                                                                       WEMPE F., KUHLMANN J.K., SCHEIT K.H.;
BIOCHEM. BIOPHYS. RES. COMMUN. 202:12
-!- FUNCTION: CHEMOTACTIC FACTOR THAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 92181448.
WEMPE F., EINSPANIER R., SCHEIT K.H.;
BIOCHEM. BIOPHYS. RES. COMMUN. 183:232-237(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
STYSSUE-SEMINAL PLASMA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CYTOKINE;
SIGNAL
                                                                                                                               MOD_RES
                                                                                                                                                                    SIGNAL
                                                                                                                                                                                       CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA CELL
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WEMPE F., HENSCHE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE-SEMINAL PLASMA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                          PROSITE;
                                                                                                                                                                                                                              HSSP;
                                                                                                                                                                                                                                                                              EMBL; L32659; G624394; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 94338337.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              72 EICADPKEKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       G-0
                                                                                                                                                                                                                                                                                                                                      SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                          A39296; A39296.
JC2336; JC2336.
; P13500; IMCA.
                                                                                                                                                                                                                                                                                                                                                         NEUTROPHILS.
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11; Conser
                                                                                                                                                                                     PS00472; SMA: CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                   (CHEMOKINE CC).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HENSCHEN A., SCHEIT K.
BIOL. 10:671-679(1991).
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AA;
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llarity 91.78;
Conservative
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XIS; SIGNAL; GLYCOPROTEIN;
                                                                                                                                                                                     SMALL_CYTOKINES_CC; XIS; SIGNAL.
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94.8%;
91.7%;
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Score 92;
Pred. No.
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Pred. No. 2.92e-09;
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DF52F6EC
                                                                       PYRROLIDONE CARBOXYLIC SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
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PYRROLIDONE CARBOXYLIC
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                  MONOCYTE CHEMOTACTIC
                                                                                                                                                                    BY SIMILARITY
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                                                                                                                                                                                                                                                                                                                                                                         202:1272-1279(1994).
DR THAT ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRECURSOR (MCP-1A) (MCP-1) (ACIDIC
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 5.26e-09;
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                     DB 1;
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                 Length
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FERRICAN CONCEPTED ON SET TO DESCRIPTION OF 
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                                                                                                             SEQUENCE FROM N.A. WILLIAMS C.M., NEW FLANAGAN B.F.;
                                                                                                                                                                                                     15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
RATTUS NORVEGICUS (RAT).
RETRAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE: 34.00 YUKI.N.;
YOSHIMURA T., YUHKI.N.;
J. IMMUNOL. 146:34883-3488(1991).
J. IMMUNOL. 146:3488 THAT ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
STRAIN-NEW ZEALAND WHITE;
MEDLINE; 91225489.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MCP1_RABIT STANDARD; PRT; 125 AA. P28292; O1-DEC-1992 (REL. 24, CREATED) O1-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE) MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
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                                                                                                                                                                                                                                                                                                                                 EOTA_RAT
P97545; 008780;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORYCTOLAGUS CUNICULUS (RABBIT).
EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                        TISSUE-LUNG;
                                                        SEQUENCE FROM
                                                                                                 SUBMITTED
                                                                                                                                                                                               EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NEUTROPHILS.
-!- SUBUNIT: MONOMER OR HOMODIMER;
-!- SIMILARITY: BELONGS TO THE INTE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE;
                        SHII Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
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P13500; IMCA.
TE; PS00472; SMALL_CYTOKINES_CC; 1.
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Similarity 100.0%;
11; Conservative
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                                                                                               (DEC-1996)
(MAY-1997)
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                                                                                                                                    NEWTON
                                                                                                                                                                                                                                                                                                                                                     STANDARD;
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EMBL/GENBANK/DDBJ DATA BANKS
                                                                                             EMBL/GENBANK/DDBJ DATA BANKS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 91; I
Pred. No. 9.
                                                                                                                                    MILSON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BY SIMILARITY.
MONOCYTE CHEMOTACTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PYRROLIDONE CARBOXYLIC
                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFLAMMATORY RESPONSE; GLYCOPROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MER; IN EQUILIBRIUM (BY INTERCRINE BETA FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FBAC9D27 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                    S.A.,
                                                                                                                                                                                                                                                                                                                                                     97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1; I
9.47e-09;
                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                    COLEMAN J.C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROTEIN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIMILARITY).
(SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BUT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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THE SULPH SEE THE SEE 
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Best Local S
Matches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-FEB-1996
01-FEB-1996
15-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DISULFID
                                                               C-C) (CHEMOKINE CC).

EMBL; U26426; G995911; -.

EMBL; U40672; G1113937; -.

MGD; MGI:103576; SCYAN11.

PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.

EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN;
                                                                                                                                                                                                                                    -i- INDUCTION: BY INTERFERON GAMMA AND LIPOPOLYSACCHARIDE (LPS).
-i- PTM: O-GLYCOSYLATED (PROBABLE).
-i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTO C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA;
EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EOTA_MOUSE
P48298;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -!- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, A FEATURE OF ALLERGIC INFLAMMATORY REACTIONS (BY SIMIL-!- SUBCELLULAR LOCATION: EXTRACELLULAR.
-!- PIM: O-GLYCOSYLATED (PROBABLE).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SC-C) (CHEMOKINE CC).
EMBL; Y08358; E274141; -.
EMBL; U98537; G2098785; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-C57BL/6J; 1
MEDLINE; 96158746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SCYA11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EOTAXIN PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GUTIERREZ-RAMOS J.-C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GONZALO J.-A., JIA G.-Q., AGUIRRE V., FRIEND D., COYLE A.J., JENKINS N.A., LIN G.-S., KATZ H., LICHTMAN A., COPELAND N.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 96004658.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IMMUNITY 4:1-14(1996).
-!- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS (A PROMINENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ROTHENBERG M.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE-LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     71 EICADPKKKWVQ
                                                                                                                                                                                                                                                                                                                                                                  FEATURE OF ALLERGIC INFLAMMATORY REACTIONS), BUT NOT LYMPHOCYTES, MACROPHAGES OR NEUTROPHILS.
SUBCELLULAR LOCATION: EXTRACELLULAR.
TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN THE THYMUS.
EXPRESSION INDUCIBLE IN THE LUNG (TYPE I ALVEOLAR EPITHEUIAL CELLS), INTESTINE, HEART, SPLEEN, KIDNEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 EICADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WBERG M.E., LUSTER A.D.,
NATL. ACAD. SCI. U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
11; Conser
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(REL.
RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 23
24 97
32 57
32 73
34 94
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     322
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            33, CREATED)
33, LAST SEQUENCE UPDATE)
36, LAST ANNOTATION UPDATE)
(EOSINOPHIL CHEMOTACTIC PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10851
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91.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 90; DB 1; 1
Pred. No. 1.70e-08;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          POTENTIAL.
EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 POTENTIAL
   POTENTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LEDER P.;
92:8960-8964(1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05B4ED45 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S (IN REF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROTEIN) .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2)
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                                                                      SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                       (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROMINENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KOPF M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
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TRESULD AND READ AND 
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-!- SUBUNIT: MONORALA.

-!- SIMILARITY: BELONGS TO THE INTERCRINE BEY

-!- SIMILARITY: BELONGS TO THE INTERCRINE BEY

C-C) (CHEMOKINE CC).

R EMBL; X72308; G313708; ALT_INIT.

R EMBL; X72309; -; NOT_ANNOTATED_CDS.

R EMBL; X71087; G288399; -

EMBL; X71087; G288399; ALT_INIT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRUCTURE BY NMR, AN MEDLINE; 97053697.
KIM K.-S., RAJARATHI
FEBS LETT. 395:277-
                                                                                                                                                                                                                                                                                          MEDINE; 97263733.

MEUNIER S., BERNASSAU J.-M., GUILLEMOT J.-C., FERRARA P., LAN MEUNIER S., BERNASSAU J.-M., GUILLEMOT J.-C., FERRARA P., LAN BIOCHEMISTRY 36:4412-4422(1997).

FIOCHEMISTRY 39:4412-4422(1997).

FIOCHEMISTRY 36:4412-4422(1997).

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DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDLINE; 94375065.
OPDENAKKER G., FITEN P., NYS
LAUREYS G., VAN DAMME J.;
GENOMICS 21:403-408(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.

MEDLINE; 93305913.

MINTY A., CHALON P., GUILLEMOT J.C., KAC
MAGAZIN M., MILOUX B., MINTY C., RAMOND
SHIRE D., FERRARA P., CAPUT D.;
EUR. CYTOKINE NETW. 4:99-110(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA;
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-DEC-1992 (REL. 24, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (MCP
CHEMOATTRACTANT PROTEIN 3) (NC28).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MCP3_HUMAN
P80098;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE OF 30-99.
TISSUE=OSTEOSARCOMA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPDENAKKER G., FROBIOCHEM. BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A., AND MEDLINE; 93213290.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 92308855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRUCTURE BY NMR.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N DAMME J., PROOST P., LENA
EXP. MED. 176:59-65(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10
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11; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RAJARATHNAM K., CL
395:277-282(1996).
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73
10893
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91.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUBUNIT.
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Pred. No. 1.70e-08;
0; Mismatches 1
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BY SIMILARITY.
BY SIMILARITY.
F85A96BC CRC32;
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191:535-542(1993).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ROY
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A N., LUPKER
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                                                                                                                                                                                                            CYTOKINE
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RESULTATION OF THE RESULT.
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE; 96189937.
PONATH P.D., QIN S., RINGLER D.J., CLARK-LEWIS I., WANG J.,
PONATH P.D., GONZALO J.A., NEWMAN W., GUTIERREZ-RAMOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EOTA_HUMAN STANDARD;
p51671; p50877; Q92490; Q92491;
Q1-QCT-1996 (REL. 34, CREATED)
Q1-QCT-1996 (REL. 34, LAST SEQUENCE UP
Q1-NOV-1997 (REL. 35, LAST ANNOTATION
GARCIA-ZEPEDA E.A., ROTHENBERG MORTON C.C., LUSTER A.D.; GENOMICS 41:471-476(1997).
                                                                   TISSUE-PLACENTA;
MEDLINE; 97312708.
                                                                                                                                                           BARTELS J., SCHLUETER C., CHRISTOPHERS E., SCHROEDE
                                                                                                                                                                           MEDLINE; 963
BARTELS J.,
                                                                                                                                                                                                                                                                                MEDLINE; 96205964.
KITAURA M., NAKAJIMA T., II
TIFFANY H.L., MURPHY P.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. MEDLINE; 96181758. GARCIA-ZEPEDA E.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; C
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN)
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SIGNAL
                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                            BIOCHEM.
                                                                                                                                                                                                                              SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                   TISSUE-SMALL INTESTINE;
MEDLINE; 96205964.
                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LUSTER A.D.;
NAT. MED. 2:449-456(1996).
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                                                                                                                                                                                                                TISSUE-FORESKIN;
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                                                                                                                                                                                                                                                                   BIOL.
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; S32222; S32222.
; A54678; A54678.
; 1NCV; 15-OCT-97.
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11; Conser
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                                                                                                                                            BIOPHYS.
                                                                                                                                                                                            96374440.
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                                                                                                                                                             SCHROEDER J.M.;
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91.7%;
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                                                                                                                                          COMMUN.
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Pred. No. 1.70e-08;
0; Mismatches 1
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PYRROLIDONE CARBOXYLIC ACID.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERTEBRATA;
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                                                     z
                                                                                                                                          225:1045-1051(1996)
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                                                     WEREMOWICZ
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; GLYCOPROTEIN;
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                                                     M.N.
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Best Local S
Matches 1
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EMBL; U34780; G1185440; --
EMBL; D49372; G1552241; --
EMBL; Z69291; E221170; --
EMBL; Z75668; E251275; --
EMBL; Z75669; E251275; --
EMBL; Z75669; E251258; --
EMBL; U46572; G2088509; --
EMBL; Z92709; E329504; --
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TISSUE-LUNG;
MEDLINE; 97445071.
HEIN H., SCHLUETER
                                                                                                                                                                                                                                                      MCP2_PIG STANDARD; PRT; 99 AA.
P49873;
01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VARIANT
SEQUENCE
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DISULFID
VARIANT
VARIANT
                                     EMBL; Z48
PROSITE;
                                                                                                                          BIOCHEM.
                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE; 95091716.
HOSANG K.K. KNOKE I.I., KLAUDINY J.J.,
SCHEIT K.K.;
                                                                                                                                                                                               SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHO
EUTHERIA; ARTIODACTYLA
                                                                                                                                                                                                                                             CHEMOATTRACTANT PROTEIN 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BIOCHEM. BIOPHYS. RES. COMMUN. 237:537-542(1997).

-!- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN DIRECTLY PROMOTES THE ACCUMULATION OF ECSINOPHILS, A PROMINENT FEATURE OF ALLERGIC INFLAMMATORY REACTIONS.
                                                                                                                                                                                                                                      SCYA8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EOSINOPHIL; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE;
                                                                         -
                                                                                                             <del>-</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BARTELS J.;
              SIGNAL
                          CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ÷
CHAIN ECHEMOTACTIC FACTOR THAT ATTRACTS NO
CAN BIND HEPARIN.

I SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM
I SIMILARITY: BELONGS TO THE INTERCRINE BETA FA
C-C) (CHEMOKINE CC).

EMBL; 248480; G683719; -
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.

EYTOKINE; CHEMOTAXIS; SIGNAL; HEPARIN-BINDING; IN
SIGNAL
1 23 BY SIMILARITY.

CHAIN
24 99 MONOCYTE CHEMOTACTIC
                                                                                                                                                                                                                                                                                                                                                                                                71 DICADPKKKWVQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity les 10; Conser
                                                                                                                                                                                                                                                                                                                                                                         :|||||| ||||
1 EICADPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBCELLULAR LOCATION: EXTRACELLULAR.

SUBCELLULAR LOCATION: EXTRACELLULAR.

PTM: O-GLYCOSYLATED (PROBABLE).

INDUCTION: BY TINF-ALPHA, IL-1-ALPHA AND INTERPERON GAMMA.

SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                     12
                                                                                                                                                                                                                                      OR MCP2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PS00472; SMALL_CYTOKINES_CC; IL; CYTOKINE; CHEMOTAXIS; GLYTORY RESPONSE; POLYMORPHISM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (CHEMOKINE CC).
                                                                                                                          BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SCHLUETER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97
                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           С.,
                                                                                                                                                                                                                                                                                                                                                                                                                                   91.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23
97
57
73
73
23
23
51
79
10732
                                                                                                                                                                                                           CHORDATA;
                                                                                                                        COMMUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KULKE R.,
                                                                      HOMODIMER; IN EQUILIBRIUM (BY TO THE INTERCRINE BETA FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ¥;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 89;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY.
BY SIMILARITY.
L'>P (IN CLONE 3
A'>T (IN CLONE 5
R'>S (IN CLONE 5
R'>R (IN CLONE 5
 MONOCYTE CHEMOTACTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EOTAXIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       POTENTIAL.
                                                                                                                                                                                                           VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6C0F3D98
                                                                                                          205:148-153(1994).
DR THAT ATTRACTS MONOCYTES.
                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CHRISTOPHERS E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Le
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CRC32;
                                                                                                                                               WEMPE F.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  34).
34).
53).
                        INFLAMMATORY RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL
 PROTEIN 2
                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SCHROEDER J.M.,
                                                                                                                                               WUTTKE
                                                                     SIMILARITY).
(SMALL CYTOKINE
                                                                                                           THIS PROTEIN
                                                                                                                                                 E.E.
                                                                                                                                                                                                                                                                                                                                                                                                                       0
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Best Local (
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Best Local
                                                                                                                                                                                           Matches
                                                                MCP5_MOUSE STANDARI

Q62401;

01-NOV-1997 (REL. 35, 0

01-NOV-1997 (REL. 35, 1

15-JUL-1998 (REL. 36, 1

MONOCYTE CHEMOTACTIC PI
                                                                                                                                                                                                                                DISULFID
DISULFID
CARBOHYD
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DISULFID DISULFID SEQUENCE
                                                                                                                                                                                                                                                                                                            EMBL; L04
PROSITE; 1
CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MCP1_CAVPO STANDARD; PRT; 120 AA.
Q08782;
Q1-NOV-1995 (REL. 32, CREATED)
Q1-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
                  SCYA12 OR MCP5.

MUS MUSCULUS (MOUSE).

EUKARYOTA; METAZOA; CHORDATA;

EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                       CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHEMOATTRACTANT PROTEIN-1).
SCYA2 OR MCP1.
CAVIA PORCELLUS (GUINEA PIG).
EUKARYOTA; METAZOA; CHORDATA;
                                                         CHEMOKINE)
                                                                                                                                                                                                                                                                                                  SIGNAL
                                                                                                                                                                                                                                                                                                                                                   NEUTROPHILS.
-!- SUBUNIT: MONOMER OR
-!- SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                                                                                                         J. IMMUNOL.
                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=Z; TISSUE=S
MEDLINE; 93267104.
                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOD_RES
 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                MOD_RES
                                                                                                                                                                                                                                                                                                                                                                               -! - FUNCTION:
                                                                                                                                                                                                                                                                                                                                                                                                 YOSHIMURA T.
                                                                                                                                                                        71 EVCADPTQKWVQ 82
                                                                                                                                                                                           Local Similarity 83.3% tes 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      73
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                                                                                                                                                                                                                                                                                                                                         C-C)
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                                                                                                                                                      EICADPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EVCADPQQKWVQ
                                                                                                                                                                                                                                                                                                                      L04985; G349821; -.
TE; PS00472; SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
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                                                                                                                                                                                                                                                                                                                                        (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                             CHEMOTAXIS; SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-SPLEEN;
                                                                                                                                                                                                                              33
34
97
120
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                                                                                                                                                                                                                                 ĀĄ;
                                                                                                                 STANDARD;
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120
24
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    CREATED)
    LAST SEQUENCE UPI
    LAST ANNOTATION (
PROTEIN 5 PRECURS)

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73
97
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75
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                                                                                                                                                                                                                                                                                                                                                  HOMODIMER; IN EQUILIBRIUM (BY TO THE INTERCRINE BETA FAMILY
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                                                                                                                                                                                                                                 MW;
                                                                                                                                                                                          Score 88;
Pred. No.
1; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 88;
Pred. No.
                                                                                                                                                                                                                                                                    ; INFLAMMATORY RESPONSE; GLYCOPROTEIN.
BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
SIMILARITY).
                                                                                                                                                                                                                                            POTENTIAL.
                                                                                                                                                                                                                                                  BY SIMILARITY.
BY SIMILARITY.
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BY SIMILARITY.
BY SIMILARITY.
                             VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B7620BCF CRC32;
                                                                  PRECURSOR (MCP-5)
                                                                                                                                                                                                                                 22FAD257 CRC32;
                                                                                                                                                                                           Mismatches
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                                                                                     UPDATE)
                                                                                                                                                                                         . 5.44e-08;
                                                                                                                 104
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                                                                           UPDATE)
                                                                                                                                                                                                              DB 1;
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                                                                                                                 A
                                                                                                                                                                                                             Length 120;
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                                                                  (MCP-1 RELATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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(SMALL CYTO
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RESULPT RESULP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
MEDIJURE; 95091818.
JOSE P.J., ADCOCK I.M., G
WELLS T.C., WILLIAMS T.J.
BIOCHEM. BIOPHYS. RES. CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P80325;
01-JUN-1994 (REL. 2
01-OCT-1996 (REL. 3
15-JUL-1998 (REL. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C-C) (CHEMOKINE CC).

EMBL; U50712; G14477582; -.

EMBL; U506670; G1881583; -.

MGD; MGI:108224; SCYA12.

PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.

CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE; 95173589.

ROTHENBERG M.E., LUSTER A.D., LILLY J. EXP. MED. 181:1211-1216(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CHAIN
                          JOSE P.J., GRIFFITHS-JOHNSON D.A., MOQBEL R., TOTTY N.F., TRUONG O., J. EXP. MED. 179:881-887(1994).
                                                                                                                         STRAIN-HARTLEY; TI
MEDLINE; 94157409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAVIA PORCELLUS (GUINEA PIG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EOTAXIN PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EOTA_CAVPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <del>:</del> :
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J. EXP. MED. 185:99-109(1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SARAFI M.N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JIA G.-Q., GONZALO J.A., LLOYD C., WERSHIL B.K., GUTIERREZ-RAMOS J.C., J. EXP. MED. 184:1939-1951(1996).
                                                                                                                                                                                       SEQUENCE OF 24-96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                72 EICADPKEKWV 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \vdash
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TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND THYMUS. ALSO FOUND IN THE SALIVARY GLANDS CONTAINING LYMPH NODES, BREAST, HEART, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON. INDUCTION: BY IFN-GAMMA AND LIPOPOLYSACCHARIDE (LPS).

SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FUNCTION: CHEMOTACTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           104 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GARCIA-ZEPEDA E.A.,
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23
34
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                                                                                                                                                          TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11
      RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29, CREATED)
34, LAST SEQUENCE UPDATE)
36, LAST ANNOTATION UPDATE)
(EOSINOPHIL CHEMOTACTIC PROTEIN).
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90.9%;
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                                                                                                                                                                                                                                                  T.J., POWER C.A.;
S. COMMUN. 205:788-794(1994)
                                                                                                                                                                                                                                                                                                                 GRIFFITHS-JOHNSON D.A., BERKMAN
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   TO THE PRESENCE OF
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MONOCYTE CHEMOTACTIC PROTEIN
BY SIMILARITY.

BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
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                                                           HSUAN J.J., WILLIAMS
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1.73e-07;
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ALLERGENS,
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                                                           D.T.,
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Matches
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ILB_CANFA
P41324;
01-FEB-1995
01-FEB-1995
01-NOV-1995
  EMBL; D1
EMBL; U1
PROSITE;
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CONFLICT
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-!- SUBCELLULAR LOCATION: EXTRACELULAR.
-!- TISSUE SPECIFICITY: LUNG.
-!- PTM: O-CLYCOSYLATED (PROBABLE).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOXICE CC).
EMBL; V108941; G687656; -.
                                                                                                                                                             KUKIELKA G.L., SMITH W.C., LAROSA G.J., MANNING A.M.,
MENDOZA L.H., DALY T.J., HUGHES B.J., YOUKER K.A., HAWKINS H.K.,
MICHAEL L.H., ROT A., ENTMAN M.L.B.J.,
J. CLIN. INVEST. 95:89-103(1994).
- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
- BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL, ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
                                                                                                                                                                                                                                                                                                                                                                                                MATSUMOTO Y., MOHAMED A.,
GOITSUKA R., TSUJIMOTO H.
ISHIKAWA J., HOTTA K., SU
CYTOKINE 6:455-461(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA; METAZOA;
EUTHERIA; CARNIVORA.
                                                                                                   RESPONSE TO AN INFLAMMATORY
-!- SUBUNIT: HOMODIMER.
-!- SIMILARITY: BELONGS TO THE
                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-LYMPH NODE;
MEDLINE; 95127913.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE; 94010328.
ISHIKAWA J., SUZUKI S.,
GENE 131:305-306(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CANIS FAMILIARIS (DOG)
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C-X-C) (CHEMOKINE CXC).
BL; D28772; G5517100; -.
BL; D14285; G475152; -.
BL; U10308; G607814; -.
OSITE; PS00471; SMALL_CYTO
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31, LAST SEQUENCE UI
32, LAST ANNOTATION
  SMALL_CYTOKINES_CXC;
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TO H., HASEGAW
., SUZUKI K.,
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Pred.
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BY SIMILARITY.
POTENTIAL.
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DD28C7E5 CRC32;
                                                                                                       INTERCRINE
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GLYCOPROTEIN;
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5.42e-07;
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                                                                                                     ALPHA FAMILY (SMALL CYTOKINE
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YOSHIHARA
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Best Local
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EMBL; X78306; G463254; -.

EMBL; S74436; G786591; -.

PIR; S42496; S42496.

HSSP; P10145; 3118.

PROSITE; PS00471; SMALL_CYTOK
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P36925;
01-JUN-1994
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DISULFID
SEQUENCE
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DISULFID
SEQUENCE
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SIGNAL
CHAIN
                                    IL8_PIG STANDARD; PRT; 103 AA. P26894; P22951; CREATED) 01-AUG-1991 (REL. 19, CREATED) 01-AUG-1992 (REL. 23, LAST SEQUENCE UPDATE) 01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEOW H.F., YOSHIMURA T., WOOD P.R., COLDITZ I.G.;
IMMUNOL. CELL BIOL. 72:398-405(1994).
-i- FUNCTION: II-8 IS A. CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS.
-i- SUBUNIT: HOMODIMER.
-i- SUBUNIT: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKIN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE; 95121931.
LEGASTELOIS I., GREENLA
GENE 150:367-369(1994).
INTERLEUKIN-8
I) (AMCF-I).
                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL
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01-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                          CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA;
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9; Conser
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9; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PS00471; SMALL_CYTOKINES_CXC; 1. CHEMOTAXIS; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.

1 22 BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101 AA;
                                                                                                                                                                                                                                                                                                                                                                           101 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (REL. 29, CREATED)
(REL. 29, LAST SEQUENCE UPDATE)
(REL. 32, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                         86.6%;
larity 75.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                 23
34
36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23
34
36
                     PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRECURSOR (IL-8).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GREENLAND
                                                                                                                                                                                                                                                86
                                                                                                                                                                                                           12
                                                                                                                                                                                                                                                                                                                                                                                                 22
101
61
77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         86.6%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                           11292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11280
                     (IL-8)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            T:,
                                                                                                                                                                                                                                                                                                                                                                           MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          W.
                                                                                                                                                                                                                                                                                       Score 84; DB 1;
Pred. No. 5.42e-07
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                          INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 84; DB 1;
Pred. No. 5.42e-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                           BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ?
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ARNAUD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                     (ALVEOLAR MACROPHAGE
                                                                                                                                                                                                                                                                                                                                                                         5A574527 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7C49D62D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₽.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MORNEX J.F., CORDIER G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ₿
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL.
                                                                                                                                                                                                                                                                                                                                Length 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 101;
                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                     CHEMOTACTIC
                                                                                                                                                                                                                                                                                         0
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                                                                                                                                                                                                                                                                                         Gaps
                     FACTOR
                                                                                                                                                                                                                                                                                         0;
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RESULT
ID MI
AC P5
DT 01
DT 01
DT 01
DT 01
DT 01
CN SC
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                                                                                                                           Query Match
Best Local S
Matches
                                                                                                                                                                                                                                C-X-C) (CHEMOKINE CXC).

EMBL; M86923; G164521; -.

EMBL; M99367; G516197; -.

EMBL; M99367; G1233612; -.

PIR; A44253; A44253.

PIR; A44253; A39819; A39819; A39819; A39819; B10145; 31L8.

PROSITE: PS00471; SMALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE; 94103307.
LIN G., PEARSON A.E., 9
WEISS D.J., MURTAUGH M.
                                                                                                                                                                     DISULFID
DISULFID
CONFLICT
CONFLICT
MIIA_RAT STANDARD; PRT; 92 AA.
P50229;
01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR
SCYA3 OR MIPIA.
                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                      GOODMAN R.B., FOSTER D.C., FORSTROM J.W., MARTIN T.R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IL8.
SUS SCROFA (PIG).
EUKARYOTA; METAZOA;
                                                                                                                                                                                                          CHAIN
                                                                                                                                                                                                                  SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=YORKSHIRE; MEDLINE; 91217086
                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE OF 26-45
                                                                                                                                                                                                                                                                                                                                                                                                                                            GOODMAN R.B
                                                                                                                                                                                                                                                                                                                                                                                                                                                     REVISION TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BIOCHEMISTRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUBMITTED (JUL-1991)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SANJANWALA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUTHERIA;
                                                                                                                                                                                                                            CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                  SUBMITTED (MAR-1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE;
                                                                                                         75 EVCLDPKEKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BIOL. CHEM. 269:77-85(1994).
                                                              19
                                                                                       |:| |||:||||
EICADPKQKWVQ
                                                                                                                           Similarity 75.0%, 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93041741.
                                                                                                                                                                                                                            CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ARTIODACTYLA.
                                                                                                                                                            1
26
34
36
33
33
87
103 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31:10483-10490(1992)
                                                                                        12
                                                                                                         86
                                                                                                                                                                      25
103
61
77
34
87
                                                                                                                                    86.6%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AND
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                                                                                                                                                             11633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              X.P
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                                                                                                                                                                                                                           INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SCAMURRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL/GENBANK/DDBJ
                                                                                                                                                              ¥.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MATHEWES
                                                                                                                                                           INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
RC -> CR (IN REF. 5).
K -> KK (IN REF. 2).
W; A012D59D CRC32;
                                                                                                                          Score 84; DB 1;
Pred. No. 5.42e-07
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R.W.,
                                                                                                                                                                                                                                                                                                         INTERCRINE ALPHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZHOU
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                                                                                                                                                                                                                                                                                                                                                                                                                                  DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OSBORN S.G.,
                                                                                                                                                                                                                            SIGNAL
                                                                                                                                           Length 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BAARSCH M.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BANKS
                                                                                                                                                                                                                                                                                                                                                    PATTRACTS NEUTROPHILS, IT IS ALSO INVOLVED IN SEVERAL CELL TYPES IN
                                                                                                                                                                                                                                                                                                                                                                                                                                   BANKS
                                                                                                                                                                                                                                                                                                         FAMILY
                                                                                                                           Indels
          (MIP-1-ALPHA)
                                                                                                                                                                                                                                                                                                         (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KUIJPER J.L.,
                                                                                                                           0
                                                                                                                           Gaps
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IRESULT
IDT 100
DT 001
DT 100
DT 110

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches
                                                                                                                                                                                                                    U1-FEB-1995 (REL. 31, CREATED)

15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)

MONOCYTE CHEMOTACTIC PROTEIN 1B (MCP-1B) (FRAG.
BOS TAURUS (BOVINE)

EUKARYOTA; METAZOA; CHORDATA
                                                                                                                                                                                                                                                                                                                     MCPB_BOVIN STAN
P80343;
01-FEB-1995 (REL. 3
01-FEB-1995 (REL. 3
15-JUL-1998 (REL. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID
DISULFID
CONFLICT
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAKAGAWA H., SHIOTA S., TAKANO K., SHIBATA F., KATO H.;
BIOCHEM. BIOPHYS. RES. COMMUN. 220:3945-948(1996).

FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
HAS CHEMOTACTIC ACTIVITY FOR MONOCYTES, NEUTROPHILS, EOSINOPHILS,
BASOPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG TNY-ALPHA
PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AND
MAY FUNCTION AS AN AUTOCKINE MEDIATOR FOR THE MACROPHAGE
PRODUCTION OF TNY-ALPHA WHICH IN TURN UP-REGULATES VASCULAR
ANDESTED MOTOCTIFE BEGINNERS.
                MEDLINE; 95034774.

PROOST P., WUYTS A., LENAERTS J.-P., VAN DAMME J.;

BIOCHEMISTRY 33:13406-13412(1994).

-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. ALSO INDUCTHE RELEASE OF GELATINASE B. THIS PROTEIN CAN BIND HEPARIN.
                                                                                                                                                              TISSUE-KIDNEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; U22414; G790633; -.
EMBL; U06435; G459150; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-LONG EVANS; TISSUE-LUNG; MEDLINE; 95238980.
SHANLEY T.P., SCHMAL H., FRIEDI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RATTUS NORVEGICUS (RAT)
EUKARYOTA; METAZOA; CHO
EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BIOCHEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-CD-
                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE OF 24-57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 95298037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IMMUNOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BINDS HEPARIN.
INDUCTION: BY LIPOPOLYSACCHARIDE (LPS)
SIMILARITY: BELONGS TO THE INTERCRINE
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFLUX. THIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QICADPKETWVQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EICADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
9; Conse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96183056.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GODLESKI J.J., PAULAUSKIS J.D.;
BIOPHYS. RES. COMMUN. 211:289-295(1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ., SCHMAL H., FRIEDL 154:4793-4802(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24
34
57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE=LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    85.6%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10335
                                                                                                                                                                                                                                                      CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23
92
73
57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FRIEDL H.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           X
W
  BLOCKED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MACROPHAGE INFLAMMATORY F
BY SIMILARITY.
BY SIMILARITY.
A -> T (IN REF. 2).
C -> W (IN REF. 2 AND 3).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 83; DB 1; 1
Pred. No. 9.58e-07,
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        F48CF89F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESPONSE;
                                                                                                                                                                                                                                                                                                                          UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JONES M.L., WARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CRC32;
                                                                                                                                                                                                                                                                                                (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BETA FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ω
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROTEIN 1-ALPHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HEPARIN-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     P.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
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                                            INDUCES
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SEFFER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 9; Conser
                                                                                                                                                                                                                                                                                                       MEDLINE; 91207
CHANG H.C., HS
INT. IMMUNOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID DISULFID
 EMBL;
                                                                                MEDLINE; 97053697.

KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.;

FEBS LETT. 395:277-282(1996).

-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES,

-i- FUNCTION: CHEMOTACTIC FACTOR THAY A ROLE IN NEOPLASIA AND

INFLAMMATORY HOST RESPONSES. THIS PROTEIN CAN BIND HEPARIN.

-i- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILLIBRIUM.

-i- TISSUE SPECIFICITY: HIGHEST EXPRESSION FOUND IN THE SMALL

INTESTINE AND PERIPHERAL BLOOD CELLS. INTERMEDIATE LEVELS SEEN IN

THE HERART, PLACENTA, LUNG, SKELETAL MUSCLE, THYMUS, COLON, OVARY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MCP2_HUMAN STANDARD; PRT; 99 AA.
P80075; P78388;
01-DEC-1992 (REL. 24, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).

PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.

CYTOKINE; CHEMOTAXIS; HEPARIN-BINDING.

NON_TER 1 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHEMOATTRACTANT PROTEIN 2) (HC14). SCYA8 OR SCYA10 OR MCP2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                 VAN DAMME J., PROOST P., LENAERTS J. EXP. MED. 176:59-65(1992).
                                                                                                                                                                                                                                                                     TISSUE-OSTEOSARCOMA;
                                                                                                                                                                                                                                                                                                                                                                   BIOCHEM.
                                                                                                                                                                                                                                                                                                                                                                             VAN COILLIE E., FROYEN F
VAN AELST I., VAN DAMME
                                                                                                                                                                                                                                                                                                                                                                                                                                                               VAN COILLIE E., FITEN P., NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A., AND VARIANT GLN-69 MEDLINE; 97237052.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HOMO SAPIENS (HUMAN)
                                                                                                                                                                                                                                                                                 SEQUENCE OF 26-99
                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                   FISSUE-BONE MARROW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    SENOMICS 40:323-331(1997).
                                                                                                                                                                                                            SUBUNIT.
                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                         MEDLINE; 92308855
                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 97224420
                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     48 EICAEPKXXWVQ 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                س
                       INDUCTION: BY INTERFERON SIMILARITY: BELONGS TO THE C-C) (CHEMOKINE CC).
                                                            SPLEEN AND PROSTATE.
                                                                       SPINAL CORD AND PANCREAS. LOW LEVELS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EICADPKQKWVQ
 x99886;
Y10802;
                                                                                                                                                                                                                                                                                                                             91207938.
                                                                                                                                                                                                                                                                                                                                                                   BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIMATES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              74 AA;
                                                                                                                                                                                                                                                                                                       HSU F., FREEMAN G.
L. 1:388-399(1989).
                                                                                                                                                                                                                                                                                                                                           23-99 FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                           FROYEN F., NOMIYAMA H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12
                                                                                                                                                                                                                                                                                                                                                                   RES. COMMUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8360 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     34
                                                                                                                                                                                                                                                                                                                  FREEMAN G.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                             AND VARIANT GLN-69
                                                                                                                                                                                                                                                                                                                                           N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NOMIYAMA H.,
                                    THE
                                                                                                                                                                                                                                                                                                                                                                                OPDENAKKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred.
1; N
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BY SIMILARITY.
66172F08 CRC32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 82; DB 1; 1
Pred. No. 1.69e-06
                                   GAMMA, MITOGE
                                                                                                                                                                                                                                                                                                                                                                  231:726-730(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                              J.-P.,
                                                                                                                                                                                                                                                                                                                   GRIFFIN J.D.,
                                    MITOGENS AN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CRC32;
                                                                                                                                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SAKAKI Y.,
                                                                                                                                                                                                                                                                                                                                                                                          MIURA R.,
                                                                         SEEN IN THE
                                                                                                                                                                                                                                               OPDENAKKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TETRAPODA; MAMMALIA;
                                    AND INTERLEUKIN-1
TA FAMILY (SMALL C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 74;
                                                                                                                                                                                                                                                                                                                   REINHERZ E.L.;
                                                                                                                                                                                                                                                                                                                                                                                           FITEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MIURA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                              G: ;
                                                                       BRAIN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ₽.
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                                                                          LIVER,
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                                     CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MIP4_HUMAN
P55774;
01-NOV-1997
 SIGNAL
CHAIN
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOD_RES
DISULFID
DISULFID
VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                             01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 4 PRECURSOR (MIP-4) (PULMONARY AND ACTIVATION-REGULATED CHEMOKINE) (CC CHEMOKINE PARC) (ALTERNATIVE ACTIVATED MACROPHAGE ASSOCIATED CC CHEMOKINE 1) (AMAC-1).
SCYA18 OR MIP4.
                                           CYTOKINE;
                                                   EMBL; AB000221; D1022520; -.
EMBL; Y13710; E321838; -.
PROSITE; PS00472; SMALL_CYTO
                                                                                              ----
                                                                                                                                                                                                                                      SUBMITTED (AUG-1997)
                                                                                                                                                                                                                                                                               HIESHIMA K., IMAI T., BABA M., SHOUDAI K., ISHIZUKA K., NAKAGAWA T., TSURUTA J., TAKEYA M., SAKAKI Y., TAKATSUKI K., MIURA R., OPDENAKKER G., VAN DAMME J., YOSHIE O., NOMIYAMA H. J., IMMUNOL. 159:1140-1149(1997).
                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A., AND TISSUE=AORTA, AND LUNG; MEDLINE; 97376836.
                                                                                                                                                                                                                                                                                                                                                                                                             EUKARYOTA;
EUTHERIA; F
                                                                                                                                                                                                                                                                                                                                                                                                                  SCYAls ON FLAT.
HOMO SAPIENS (HUMAN).
CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MIM;
                                                                                                                                        -;
                                                                                                                                                                        <del>-</del>
                                                                                                                                                                                                                DISCUSSION OF SEQUENCE.
                                                                                                                                                                                                                                                          SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                   PATENT NUMBER US5504003.
                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HSSP; P13500; 1MCA.
                                                                                                                                                                                             WELLS
                                                                                                                                                                                                       MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        POLYMORPHISM.
                                                                                      LEUKOC. BIOL. 61:545-550(1997).

FUNCTION: CHEMOTRACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION INTO B CELL FOLLICLES IN LYMPH NODES.

TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN THE LUNG. A LOW LEVEL EXPRESSION IS SEEN IN LYMPHOID TISSUES SUCH AS LYMPH NODE THYMUS AND APPENDIX.

INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              73 EVCADPKERWVR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 EICADPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        602283;
                                         13710; E321838;
PS00472; SMALL
E; CHEMOTAXIS; I
                                                                                                                                                                                                                                                                                                                                                                                                             Y; METAZOA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PS00472;
                                                                                    (CHEMOKINE CC)
                                                                                                                                                                                                       97275308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99
                                                                                                                                                                                                                                     MUELLER C.,
AUG-1997) TO
                                                                                                                                                                                                                                                                                                                                                                              M N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24
24
34
35
69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                        SMALL_CYTOKINES_CC;
XIS; INFLAMMATORY RE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11246 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               84.5%;
                                                                                                                                                                                                                                                                                                                                              AND
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59
59
59
59
  20
89
70
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                                                                                                                                                                                                                                     POLITZ O., HAKIY N., EMBL/GENBANK/DDBJ DA
                                                                                                                                                                                                                                                                                                                                              PARTIAL SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 82;
MACROPHAGE INFLAMMATORY BY SIMILARITY. BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROBABLE.

MONOCYTE CHEMOTACTIC PROTEIN
PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                       VERTEBRATA; TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HEPARIN-BINDING; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5DDD5C20 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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                                         RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.69e-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                            BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                     DATA BANKS
                                         SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
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                     PROTEIN
                                                                                                                                                                                                                                               C.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                       MAMMALIA;
                                                                                                                                                                                                                                               GOERDT
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Best Local S
Matches
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Best Local Similarity
Matches 9; Consei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IL8_BOVIN STANDARD;
P79255;
01-NOV-1997 (REL. 35, CRE
01-NOV-1997 (REL. 35, LAS
01-NOV-1997 (REL. 35, LAS
01-NOV-1997 (REL. 35, LAS
                                                                                                                                                                                                                                                  IL8_RABIT STANDARD; PRT; 101 AA. P19874; 01-FEB-1991 (REL. 17, CREATED) 01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE) 01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE) INTERLEUKIN-8 PRECURSOR (IL-8) (NEUTROPHIL AT PROTEIN-1) (NAP-1) (PERMEABILITY FACTOR 1) (RECORDARD)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MICROB. PATHOG. 20:203-212(1996).

-!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-!- SUBJULT: HOT MOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS (BY SIMILARITY).
-!- SUBJULT: HOMODIMER (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
C-X-C) (CHEMOKINE CXC).

EMBL; S82598; G1699354; -.
                                       SEQUENCE FROM N.A.
STRAIN-NEW ZEALAND WHITE; TISSUE
MEDLINE; 91225489.
YOSHIMURA T., YUHKI N.;
J. IMMUNOL. 146:3483-3488(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHO
EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
SEQUENCE OF 23-53
                                                                                                                                                                                             ORYCTOLAGUS CUNICULUS (RABBIT EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAMPOS M., BABIUK L.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. MEDLINE; 96304552.
                                                                                                                                                                             EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MORSEY M.A., POPOWYCH Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               68 QICADPNKKWVQ 79
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|:| :||:|||
| EICADPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EICADPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            l Similarity
8; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHEMOTAXIS;
                                                                                                                                                                             LAGOMORPHA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83.5%;
larity 66.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A
A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SMALL_CYTOKINES_CXC; 1.
XIS; INFLAMMATORY RESPONSE;
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  35, CREATED)
35, LAST SEQUENCE UI
35, LAST ANNOTATION
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101
61
77
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                83.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11291
                                                                                                                                                                                                                    (RABBIT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (IL-8).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ₩;
                                                                                                            TISSUE-SPLEEN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KOWALSKI J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
Pred.
3; M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 81; DB 1; Le
Pred. No. 2.96e-06;
2; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BY SIMILARITY.
BY SIMILARITY.
, 0E39C526 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INTERLEUKIN-8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 052AA3DC CRC32;
                                                                                                                                                                                          VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NO 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         UPDATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GERLACH G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TETRAPODA;
                                                                                                                                                                                                 TETRAPODA;
                                                                                                                                                                                                                                                                ATTRACTANT/ACTIVATION (RPF1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
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RESULT DISCOLUTION OF THE PORT OF THE PORT
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RA MEDLINE; 91058518.

RA BEAUBLEN S.C., COLLINS P.D., JOSE P.J., TOTTY N.F., HSUAN J.,

RA WATERFIELD M.D., WILLIAMS T.J.;

RA WATERFIELD M.D., WILLIAMS T.J.;

RA HIOCHEM. J. 271:797-801(1990).

C. II FUNCTION: II-8 IS A CHEWOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,

C. BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN

C. MEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN

C. I. SUBUNIT: HOMODIMER.

C. I. SUBUNIT: HOMODIMER.

C. SUBUNIT: HOMODIMER.

C. SUBUNIT: HOMODIMER.

C. SUBUNIT: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).

C. PAR: $13052; $13052.

RASOP; P10145; 3IL8

DR PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.

CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 9; Conser
                              C-C) (CHEMOKINE CC).
EMBL; J04467; G387169; -.
EMBL; M19681; G387168; -.
PIR; A30209; A30209.
PIR; A30861; A30861.
PIR; S16226; S16226.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MCP1_MOUSE STANDARD; PRT; 148 AA. P10148; 01-MAR-1989 (REL. 10, CREATED) 01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE) MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID
DISULFID
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL
CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE OF 26-42.
MEDLINE; 91293127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 8823 ROLLINS B.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. MEDLINE; 88234501.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GROWTH FACTOR-INDUCIBLE PROTEIN SCYA2 OR MCP1 OR JE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MUS MUSCULUS (MOUSE)
EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                  <del>.</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KAWAHARA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BIOL.
                                                                                                                                                                                                                       SUBUNIT: MONOMER OR HOMODIMER;
INDUCTION: BY PLATELET-DERIVED
SIMILARITY: BELONGS TO THE INTE
                                                                                                                                                                                                                                                                                                                                                                                      DAMME J., DECOCK B., BERTINI F
W., OPDENAKKER G., MANTOVANI A
J. BICCHEM. 199:223-229(1991)
                                                                                                                                                                                                                                                                                                                                                              FUNCTION:
                                                                                                                                                                                                                                                                                                                             NEUTROPHILS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25
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      ; p13500
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A R.S., DEU
CHEM. 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RODENTIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1
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larity 75.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MORRISON
CAD. SCI.
                                                                                                                                                                                                                                                                                                                                                           CHEMOTACTIC FACTOR THAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEUEL T.F.;
264:679-682(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22
101
61
77
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11402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .s.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WW;
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BY SIMILARITY.
BY SIMILARITY.
K -> I (IN REF. 2)
K -> CB32CC30 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 81; DB 1; I
Pred. No. 2.96e-06;
2; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STILES C.D.;
85:3738-3742(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                        A .
                                                                                                                                                                                                                                                             IN EQUILIBRIUM (BY GROWTH FACTOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         CONINGS
                                                                                                                                                                                                                                                                                                                                                        ATTRACTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      R., LENAERTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 101;
                                                                                                                                                                                                                           FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                        MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (PLATELET-DERIVED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                        SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                           BUT
                                                                                                                                                                                                                                                                                                                                                                                                                                                      J.-P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MGD; MGI:98259; SCYA2.
PROSITE; PS00472; SMALL
CYTOKINE; CHEMOTAXIS; SSIGNAL 1 23
CHAIN 24 148
MOD_RES 24 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                 MILA,MOUSE STANDARD; en.,
P10855; P14096;
01-UUL-1989 (REL. 11, CREATED)
01-APR-1990 (REL. 14, LAST SEQUENCE UPDATE)
01-CCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALDHA PRECURSOR (MIP-1-ALPHA)
MACROPHAGE INFLAMMATORY PROTEIN 1-REPORTEIN) (L2G25B).
                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. MEDLINE; 89093958. BROWN K.D., ZURAWSK J. IMMUNOL. 142:679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DISULFID
DISULFID
CARBOHYD
SEQUENCE
SEQUENCE OF 24-42.

MEDLINE; 88154745.

WOLPE S.D., DAVATELIS G., SHERRY B., BEUT!

NGUYEN H.T., MOLDAWER L.L., NATHAN C.F., 1

J. EXP. MED. 167:570-581(1988).

-!- FUNCTION: MONOKINE WITH INFLAMMATORY,
                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE; 89184547.
KWON B.S., WEISSMAN
                                                                                                                                                                                                                                                                                                                                                          DAVATELIS G., TEKAMP-OLSON P., WOLPE S. GALLEGOS C., COIT D., MERRYWEATHER J., J. EXP. MED. 167:1939-1944(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                 (SIS-ALPHA) (HEPARIN-BINDING SCYRA) OR MIPIA. SCYRA SCY MUSCULUS (MOUSE). EUKARYOTA; METAZOA; CHORDATA;
                                                                                                     SEQUENCE FROM N.A. MEDLINE; 91237116.
                                                                                                                                                                                                                      SEQUENCE FROM N.A.
STRAIN-DBA/2J;
                                                                                                                                                                                                                                                                                                                  DAVATELIS G., GALLEGOS C., G
                                                                                                                                                                                                                                                                                                                                                                                                                        EUTHERIA; RODENTIA.
                                                                                   WIDMER U., CERAMI A.;
                                                                                                                                     PROC. NATL.
                                                                                                                                                                                         NUCLEIC
                                                                                                                                                                                                  GROVE M.,
                                                                                                                                                                                                           MEDLINE; 91016858.
                                                                                                                                                                                                                                                                                                                                       REVISIONS.
                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. MEDLINE; 88258380.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73
                                                                       IMMUNOL.
                                                                                                                                                                                                                                                                                                        EXP. MED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EICADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EVCADPKKEWVQ
                                                                                                                                                                                        ACIDS RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
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                                                                                             YANG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        148 AA;
                                                                                                                                                                                                                                                     ZURAWSKI S.M., MOSMANN 142:679-687(1989).
                                                                        146:4031-4040(1991).
                                                                                                                                       ACAD.
                                                                                                                                                                                                                                                                                                       , TEKAMP-OLSON P., WOLPE S COIT D., MERRYWEATHER J., 170:2189-2189(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                             2
                                                                                                                                       SCI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SMALL_CYTOKINES_CC; 1.

XIS; SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.

23 BY SIMILARITY.

148 MONOCYTE CHEMOTACTIC PROTEIN 1.

24 PYRROLIDONE CARBOXYLIC ACID (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84
                                                                                                                                                                                      GRAHAM G., PRAGNELL 18:5561-5561(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  59
75
126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82.5%;
75.0%;
                                                                                             VAN
                                                                                                                                                                                                                                                                                                                                                                                                                                  CHORDATA;
                                                                                                                                               S.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16326
                                                                                                                                       U.S.A.
                                                                                             DEVENTER
                   SHERRY B., BEUTLER B., NATHAN C.F., LOWRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ¥;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
Pred.
1; M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                  VERTEBRATA;
                                                                                                                                    86:1963-1967(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B7572BBC CRC32;
                                                                                           s.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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No. 5.18e-06
                                                                                                                                                                                                                                                               Η.
                                                                                                                                                                                                                                                              .R.,
                                                                                                                                                                                                                                                                                                                   S.D., HER
                                                                                             MANOGUE K.R.,
                                                                                                                                                                                                 Ξ,
                                                                                                                                                                                                                                                                                                                                                                     .D., HERMSEN CERAMI A.;
                                                                                                                                                                                                                                                               ZURAWSKI
                                                                                                                                                                                                                                                                                                                                                                                                                                  TETRAPODA; MAMMALIA;
 PYROGENIC AND CHEMOKINETIC
                                                                                                                                                                                                  BLUMB
                                                                                                                                                                                                                                                                                                                           HERMSEN
                                                                                                                                                                                                                                                                                                                   Α...
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                  S.F., CERAMI
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: :
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                                                                                             SHERRY B.,
                    CERAMI A.;
                                                                                                                                                                                                                                                                                                                            LUEDKE
                                                                                                                                                                                                                                                                                                                                                                                LUEDKE
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Best Local
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EMBL; M23447; G533241; -.

EMBL; X2531; G53123; -.

EMBL; X53372; G297531; -.

EMBL; J04491; G201525; -.

EMBL; J04491; G201525; -.

EMBL; J04491; G201525; -.

EMBL; A27596; A27596.

PIR; A27596; A27596.

PIR; A30552; A30552.

PIR; A30552; A30552.

PIR; A3333; S04533.

PIR; S04533; S04533.

PIR; S11685.

EXER: S11685.
C-C) (CHEMOKINE CC).

EMBL; X17053; G55531; -

EMBL; X17053; G55531; -

EMBL; M57441; G205334; -

PIR; JN0128; JN0128.

PIR; S07723; S07723.

PIR; S07723; S07723.

PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.

CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE; SIGNAL; SMALLARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
DISULFID
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P14844;
P14844;
P14844;
P14878-1990 (REL. 14, CREATED)
P15-JUL-1990 (REL. 14, LAST SEQUENCE UPDATE)
P15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (IMMEDIATE-EARLY SERUM-RESPONSIVE JE PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 91128376.
YOSHIMURA T., TAKEYA M., T
BIOCHEM. BIOPHYS. RES. COM
-!- FUNCTION: CHEMOTACTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. STRAIN-WAG/RIJ; TI: MEDLINE; 90174947.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EUKARYOTA;
EUTHERIA; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RATTUS NORVEGICUS (RAT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCYA2 OR JE OR MCP1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIGNAL
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PROSITE; PS00472; SMA
                                                                                                                                                                                                                                                                                                                            <del>:</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                         NEUTROPHILS.
SUBUNIT: MONOMER OR
                                                                                                                                                                                                                                                                                                SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE SPECIFICITY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NEUTROPHILS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            H.T.H.M., F
ACIDS RES.
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8; Conse
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CHEMOTAXIS; IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
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larity 66.7%;
Conservative
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J; TISSUE-KIDNEY;
                                                                                                                                                                                                                                                                                                                                                                                TAKEYA M., TAKAHASHI K.;
HYS. RES. COMMUN. 174:504-509(1991).
CHEMOTACTIC FACTOR THAT ATTRACTS MC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A,
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INFLAMMATORY RESPONSE; SIGNAL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   53979E5E
                                                                                                                                                                                                                                                                                      MER; IN EQUILIBRIUM (BY SIMILARITY).
INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VAN DER EB A.J.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 92;
                                                                                                                                                                                                                                                                                                                                                                                MONOCYTES,
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                                                GLYCOPROTEIN
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Best Local Similarity
Matches 9; Conser
                                                                                                                                 -1- SIMILARITY: BELONGS TO THE II
C-Y-C) (CHEMORINE CXC).
EMBL; D1072; G486457; -..
EMBL; L12029; G393180; -.
EMBL; L12039; G393182; -.
EMBL; L12030; G393182; -.
EMBL; S74318; G786394; -..
EMBL; S74318; G786394; -..
EMBL; D43804; G1304174; -..
EMBL; D43805; G1304175; -..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P40224;
01-FEB-1995 (REL. 31, CREATED)
01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION (SDF-1) (PRE-B CELL GROWTH STROMAL CELL-DERIVED FACTOR 1 PRECURSOR (SDF-1) (PRE-B CELL GROWTH STIMULATING FACTOR) (PBSF) (12-O-TETRADECANOYLPHORBOL 13-ACETATE STIMULATING FACTOR)
PROPERSSED PROTEIN 1) (TPAR1) (THYMIC LYMPHOMA CELL STIMULATING FACTOR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. MEDLINE; 95073497.
JIANG W., ZHOU P., 1
WEINSTEIN I.B.;
                       PROSITE; |
CYTOKINE;
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DISULFID
DISULFID
CARBOHYD
SEQUENCE
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MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE;
                                                                                         PIR;
MGD;
                                                                                                                                                                                                                                                                                                                -1- FUNCTION: STIMULATES THE PROLIFERATION OF BONE MARROW-DERIVED I
PROGENITOR CELLS IN THE PRESENCE OF IL-7 AS WELL AS GROWTH OF STROMAL CELL-DEPENDENT B-CELL CLONE DW34 CELLS.
STROMAL CELL-DEPENDENT B-CELL CLONE DW34 CELLS.
-1- ALTERNATIVE PRODUCTS: TWO DIFFERENT FORMS (ALPHA AND BETA) ARE PROBABLY GENERATED BY ALTERNATIVE SPLICING.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         NOMURA M., NAKATA Y., UZAWA A., NOSE M., AKASHI M., SUZUKI G.; SUBMITTED (DEC-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: CHEMOATTRACTANT ACTIVE ON T-LYMPHOCYTES, MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-AKR/J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TASHIRO K., TADA H., HEILKER R., SCIENCE 261:600-603(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MUS MUSCULUS (MOUSE)
EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SDF1_MOUSE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EXP. CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE;
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                                                                    MGI:103556; SDF1.
[TE; PS00471; SMAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EICADPNKEWVO 84
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; 94181581.
A T., KIKUTANI I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93342488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RES.
                                          PS00471; SMALL_CYTOKINES_CXC; FALSE_CHEMOTAXIS; GROWTH FACTOR; SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RODENTIA.
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126
16460 .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KAHN S.M., TOMITA N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 78.4%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                148
24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . H., KISH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KISHIMOTO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 76;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MONOCYTE CHEMOTACTIC PROTEIN 1.
FYRROLIDONE CARBOXYLIC ACID (BY
SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB97F97C CRC32;
STROMAL CELL-DERIVED FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   91:2305-2309(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SHIROZU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; L
4.73e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             89
                                                                      FALSE_NEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOHNSON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            M., NAKANO T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ₿
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TETRAPODA;
                                               ALTERNATIVE SPLICING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          M.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HONJO T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
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                                                                                              Query Match
Best Local
                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SDF1.
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; C
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SDF1_HUMAN
P48061;
01-FEB-1996
01-FEB-1996
15-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID
DISULFID
VARSPLIC
                                                                                                                                                    DISULFID DISULFID SEQUENCE
                                                                                                                                                                                                                                                                                                                                           EMBL; U16752; G571508; -. EMBL; L36033; G1220366; -. PDB; 1SDF; 28-JAN-98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE; 98046030.
CRUMP M.P., GONG J.H., LOETSCHER P., RAJARATHNAM K., AMARA
ARENZANA-SEISDEDOS F., VIRELIZIER J.L., BAGGIOLINI M., SYKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
STROMAL CELL-DERIVED FACTOR 1 PRECURSOR (SDF-1)
                                                                                                                                                                                                                                                                                                                                                                                                                 -!- FUNCTION: CHEMOATTRACTANT ACTIVE ON T-LYMPHOCYTES, MONOCYTES, I NOT NEUTROPHILS.
-!- ALTERNATIVE PRODUCTS: TWO DIFFERENT FORMS (ALPHA AND BETA) ARE PROBABLY GENERATED BY ALTERNATIVE SPLICING.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTO)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE; 96039262.
                                                                                                                                                                                                                                                                PROSITE; PS00471; SMALL_CYTOKINES_CXC; FALSE_NEG. CYTOKINE; CHEMOTAXIS; GROWTH FACTOR; SIGNAL; ALTERNATIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CLARK-LEWIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENOMICS 28:495-500(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUBMITTED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STIMULATING FACTOR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                 CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRUCTURE BY NMR OF 22-88
                                                                                                                                                                                                                                 SIGNAL
                                                                                                                                                                                                                                               3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                   69 QVCIDPKLKWIQ
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                                                                                            Local
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                                                                                                                                                                                                                                                                                                                                                                                                     C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29
 EICADPKOKWVO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7; Conser
                                                                         Similarity 7; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16:6996-7007(1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (OCT-1994)
                                                                                                                                                                                                                                                                                                                          17-JUN-98.
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larity 58.3%;
Conservative
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                                                                                                                                                      AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
   12
                                     80
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                                                                                                                                                      10666 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10032
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58.3%;
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89
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BY SIMILARITY.
K -> KRLKM (IN FORM F
; 222C4E52 CRC32;
                                                                         Score 75; DB 1; I
Pred. No. 8.17e-05;
3; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
Pred.
3; M
                                                                                                                                                                                                           STROMAL CELL-DERIVED
                                                                                                                                                      4B9911C7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       75; DB 1; 1
No. 8.17e-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TASHIRO K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93
                                                                                                                                                      CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BAGGIOLINI M., SYKES B.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2; Indels
                                                                                                            Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TADA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (PRE-B
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                                                                                                                                                                                                             FACTOR
                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CELL GROWTH
                                                                                                                                                                                                                                                                                                                                                                                                                      (SMALL CYTOKINE
                                                                                                                                                                                                                                                                    SPLICING;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                         0;
                                                                       Gaps
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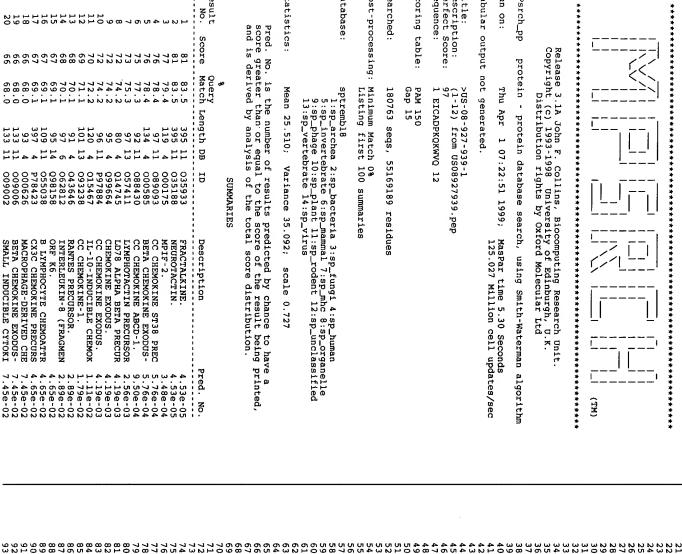
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                                                          Query Match
Best Local S
Matches
                                                                                                                                                                                                  EMBL; Z12297; G57938; -.
EMBL; L104694; G192926; -.
EMBL; S17251; G547089; -.
EMBL; X70058; G437873; -.
EMBL; S30592; S30592.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE; 94271193. THIRION S., NYS G., 1 OPDENAKKER G.;
                                                                                     DISULFID
DISULFID
CARBOHYD
                                                                                                                                                                                                                                                                                             - -
                                                                  CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-OCT-1993 (REL. 27, CREATED)
01-OCT-1993 (REL. 27, LAST SEQUENCE UPDATE)
15-UIL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (MCP-3)
CHEMOATTRACTANT PROTEIN 3) (INTERCRINE/CHEMOKINE
                                                                                                                                    SIGNAL
                                                                                                                                                                                                                                                -i- FUNCTION: CHEMOTACTIC FACTOR THAT EOSINOPHILS. BUT NOT NEUTROPHILS. ACTIVITY (BY SIMILARITY).
-i- SUBUNIT: MONOMER (BY SIMILARITY).
-i- SIMILARITY: BELONGS TO THE INTERCE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                    MEDLINE; 95081620.

JARMIN D.I., KULMBURG P.A., HUBER N.
PRIESCHL-STRASSMAYR E.E., BAUMRUKER
J. IMMUNOL. 153:5720-5729(1994).
                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 93204948.
HEINRICH J.N., RYSECK R.P., MACDONALD-BRAVO H., BRAVO R.;
MOL. CELL. BIOL. 13:2020-2030(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
TISSUB-MAST CELLS;
MEDLINE; 93094785.
KULMBURG P.A., HUBER N.E., SCHEER B.J.,
J. EXP. MED. 176:1773-1778(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MCP3_MOUSE
Q03366;
                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  BIOCHEM. BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCYA7 OR MCP3 OR FIC.
                                                                                                                          MOD_RES
                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                            SUBMITTED (JUN-1992)
                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EUTHERIA;
                                                                                                                                                                 CYTOKINE;
                                                                                                                                                                         PROSITE
                                                                                                                                                                                 MGD; MGI:9951
                                                                                                                                                       INFLAMMATORY
                                                                                                                                                                                            issp;
71 EVCAEAHOKWVE
                                                                                                                                                                                            P13500;
                             Similarity
                                                                                                                                                              PS00472; SMALL_CYTOKINES_CC; 1.
; CHEMOTAXIS; HEPARIN-BINDING; GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RODENTIA.
                                                                                                                        1 23
1 23
24 97
24 24
                      Conservative
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                                                                                                                                                                                           1MCA.
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                                                                                                                                                                                 SCYA7.
  82
                                                          10999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FITEN P.,
                             58.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHORDATA;
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                                                          WW;
                   Score
Pred.
                                                                                                                POTENTIAL.

MONOCYTE CHEMOTACTIC PI
PYRROLIDONE CARBOXYLIC
SIMILARITY).
                                                                                            BY SIMILARITY.
BY SIMILARITY.
                                                                           MISSING (IN REF.
                                                                                      POTENTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MASURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                         682F557E CRC32;
                                                                                                                                                                                                                                                         INTERCRINE BETA FAMILY (SMALL CYTOKINE
                    Mismatches
                             No.
                                                                                                                                                                                                                                                                                                                 .
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                                                                                                                                                                                                                                                                                     ATTRACTS
AUGMENTS
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                             DB 1; I
8.17e-05;
                                                                                                                                                                                                                                                                                                                          BAUMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WRANN
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                                     Length 97;
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                                                                                                                                                                                                                                                                                     MONOCYTES
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                                                                                                                                    PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BAUMRUKER
                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
                                                                                                                           ACID
                                                                                                                                                               SIGNAL;
                                                                                                                                                                                                                                                                                     ANTI-TUMOR
                                                                                                                          (BY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROTEIN).
                    Gaps
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Search completed: Thu Apr 1 07:22:34 1999 Job time: 32 secs.

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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Tabular output not generated. Run on: Thu Apr 1 07:22:51 1999; MasPar time 5.30 Seconds 125.027 Million cell updates/sec

Title: Scoring table: Sequence: Description: Perfect Score: PAM 150 Gap 15 >US-08-927-939-1 (1-12) from US08927939.pep 97 1 EICADPKQKWVQ 12

Searched: 180763 seqs, 55169189 residues

Post-processing: Minimum Match 0% Listing first 100 summaries

Database: sptremb18
1:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human
5:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle
9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified
13:sp_vertebrate 14:sp_virus

Statistics: Mean 25.510; Variance 35.092; scale 0.727

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

13 68 70.1 91 4 043646 RANTES PRECURSOR. 2.89e-02

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389AA LONG HYPOTHETICA GLYCOPROTEIN 120 (FRAG VIRAL ENVELOPE PROTEIN BETA-GALACTOSIDASE (EC HYPOTHETICAL 92.5 KD P COMPLETE NUCLEOTIDE SE ENVELOPE GLYCOPROTEIN FESISTANCE GENE. V-SERA 4.	CHCADD EX HDD OFF	1-AMINOCYCLOPROPANE-1- 1-AMINOCYCLOPROPANE-1- 1-AMINOCYCLOPROPANE-1- BETA-GALACTOSIDASE (EC HI1054 HOMOLOG (FRAGME HYPOTHETICAL 53.8 KD P ENVELOPE GLYCOPROTEIN. T01D3.3. H19022.1 PROTEIN (FRAG KIAA0462 PROTEIN (FRAG KIAA0462 PROTEIN U2266J. YFIT PROTEIN. WANNOSE-SENSITIVE HEMA 2-HYDROXY-6-OXO-7-METH RNA POLYMERASE II LARG RESISTANCE GENE HOMOLO ATP BINDING PROTEIN (F LFCA-1 PROTEIN GRECURS INSERTION ELEMENT 1561 BETA GALACTOSIDASE (FR	PRECUI 11.4 KI (FRAGN ROTEIN REDUI HENDENU E HOME PROTEI ECURSO OPTEIN AD. COSMI
5.18e+0 5.18e+0 5.18e+0 5.18e+0 5.18e+0 5.18e+0 5.18e+0 5.18e+0 5.18e+0 5.18e+0 5.18e+0 5.18e+0 5.18e+0	3.47e+0 3.47e+0 3.47e+0 3.47e+0 3.47e+0 3.47e+0 3.47e+0 3.47e+0 3.47e+0 5.18e+0 5.18e+0 5.18e+0 5.18e+0 5.18e+0 5.18e+0 5.18e+0 5.18e+0	1.01e+0 1.01e+0 1.01e+0 1.53e+0 1.53e+0 1.53e+0 1.53e+0 1.53e+0 2.31e+0 2.31e+0 2.31e+0 2.31e+0 3.47e+0 3.47e+0	1. 189e-01 1. 16e+00 1. 180e+00 1. 180e+00 2. 79e+00 4. 30e+00 4. 30e+00 4. 30e+00 6. 60e+00 6. 60e+00 1. 101e+01 1. 01e+01 1. 01e+01 1. 01e+01

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Best Local S
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Best Local Similarity 81.8%;
Matches 9; Conservative
                                                                                                             Matches
                                                                                                                                                                                                                    NATURE 387:611-617(1997).
EMBL; AF010588; G2317698; -
MGD; MGI:1097153; SCYD1.
PFAM; PF00048; 118; 1.
SEQUENCE 395 AA; 42098 M
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035188;
01-JAN-1998
01-JAN-1998
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01-NOV-1998
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FRACTALKINE.
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
EUKARYOTA; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.

MEDLINE: 97320499.

PAN Y., CLARE L., HONG Z., DOLICH S., D
GOSSELIN M., MA J., DUSSAULT B., WOOLF
GOTIERREZ-RAMOS J.C., GEARING D.;
"Neurotactin, a membrane-anchored chemo
inflammation.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ROSSI D., HARDIMAN G., COPELAND N., GILBERT D.J., JEN ZLOTNIK A., BAZAN J.F.;
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U92565; G2459677; -.
PFAM; PF00048; i18; 1.
SEQUENCE 395 AA; 42040 MW; 3997A113 CRC32;
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STRAIN-BALB/C; TISSUE-BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SCYD1
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larity 81.8%;
Conservative
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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                                                                                                       Score 81; DB 11; Length 395;
Pred. No. 4.53e-05;
2; Mismatches 0; Indels
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Pred. No. 4.53e-05;
2; Mismatches 0
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BETA-GALACTOSIDASE (EC SIMILARITY TO C2 DOMAI PC962R.
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NARDELLI B., PIPPALLA V., GE
GENTZ R., GAROTTA G.;
J. EXP. MED. 0:0-0(0).
EMBL; U85768; G1916252; -.
PFAM; PF00048; i18; 1.
JLT 5
000585
000585;
01-JUL-1997
01-JUL-1997
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01-JUL-1997
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CHAIN
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EUKARYOTA; METAZOA; CHORDATA;
RODENTIA; SCIUROGNATHI; MURID!
                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
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LESSLAUER W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL.
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J. NEUROIMMUNOL. 0:0-0(1998).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "A novel rat CC chemokine, identified by targed in brain inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            72 QFCGDPKQEWVQ 83
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Similarity 66.7%;
B; Conservation
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llarity 80.0%;
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                                                                                       PRELIMINARY;
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08, LAST SEQUENCE UPDATE)
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     CREATED)
                                                                                                                                                                                                                                                                                                             Score 76; DB 11;
Pred. No. 5.76e-04;
2; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 77; DB 4; I
Pred. No. 3.48e-04;
3; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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                                                                                                                                                                                                                                                                                                                                                                                                                   POTENTIAL.
CC CHEMOKINE ST38
053405BD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KLINKERT W.E.F., DA SILVA J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERTEBRATA; MAMMALIA;
                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDF526F0
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                                                                                       134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            119
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CRC32;
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MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 119
                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                  Length 97,
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PARMELEE D.,
                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EUTHERIA;
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SEQUENCE UPDATE)

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Best Local S
Matches
                                                                                 Matches
                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                       OS8430 PRELIMINARY;
OS8430;
OS8430;
O1-NOV-1998 (TREMBLREL 0)
O1-NOV-1998 (TREMBLREL 0)
O1-NOV-1998 (TREMBLREL 0)
CC CHEMOKINE ABCD-1.
MUS MUSCULUS (MOUSE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.

NAGIRA M., IMAI T., HIESHIMA K., KUSUDA J., RIDANPAA

NISHIMURA M., KAKIZAKI M., NOMIYAMA H., YOSHIE O.;

SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

EMBL; 08320; G2196920; -.

EMBL; 0801979; G25624925; -.

EMBL; 08002409; D1022673; -.

EFEAM; 08002409; D1022673; -.

EFEAM; 08002409; D1022673; -.

EFEAM; 08002409; D1022673; -.
                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                    "Activated murine B lymphocytes and CC Chemokine which acts selectively J. EXP. MED. 188:451-463 (1998). EMBL; AF052505; G3378116; -.
                                                                                                                                                                                                                                                                                            SHIMIZU
                                                                                                                                                                                                                                                                                                               SCHANIEL
                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. TISSUE-LIVER;
                                                                                                                                                                                                                                                                                                                                                                                                                                 CC CHEMOKINE ABCD-1.
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAAOA; CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HEDRICK J.A., ZLOTNIK A.; SUBMITTED (MAY-1997) TO E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HEDRICK J.A., ZLOTNIK A.;
"Identification and characterization of a
containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
HROMAS R.A., GRAY P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-NOV-1998 (TREMBLREL.
BETA CHEMOKINE EXODUS-2.
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHOR
                                                                                                                                                                                                                                                                                                                                   MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                     RODENTIA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73
                                        74 DICADPROVWV 84
                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
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EICADPKQKWVQ
                                                                                                                                                                                                                                                                                     T., SEIDL T., ANDERSSON J.,
                                                                                 Similarity 72.78
8; Conservative
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97400322.
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                                                                                                                                                                 92 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       134 AA;
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  11
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                                                                                                                                                                 10302 MW;
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75.08;
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14646 MW;
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FO EMBL/GENBANK/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                  MURIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                   Score 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 76; DB 4; L
Pred. No. 5.76e-04;
2; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LAST ANNOTATION UPDATE)
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                                                                                                                                                                 BC7219A0 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FE86A239 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                     MURINAE;
                                                                                 Mismatches
                                                                                                                                                                                                                                                                                     F., SPELETAS M.,
                                                                                                                                                                                                                         dendritic cells produce a
on activated T cells.";
                                                                                                   DB 11; I
9.50e-04;
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                                                                                                                                                                                                                                                                                                                                                                                                                  MAMMALIA;
MUS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  UPDATE)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                      Length
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                                                                               Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                      EUTHERIA;
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Best Local S
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches
                               099664 PRELIMINARY;
099664;
01-MAY-1997 (TREMBLREL. 0
01-MAY-1997 (TREMBLREL. 0
01-NOV-1998 (TREMBLREL. 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           057411; PRELIMINARY;
057411;
01-JUN-1998 (TREMBLREL. 0
01-JUN-1998 (TREMBLREL. 0
01-JUN-1998 (TREMBLREL. 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        O14745; PRELIMINARY; PRT; 80 AA.
O14745; O1-NOV-1996 (TREMBLREL. 01, CREATED)
O1-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
O1-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
LD78 ALPHA BETA PRECURSOR (FRAGMENT).
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                        CHAIN
NON_TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBMITTED (AUG-1995) TO EMBL; D63785; G961440; - PROSITE; PS00472; SMALL_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LYMPHOTACTIN PRECURSOR.
GALLUS GALLUS (CHICKEN).
EUKARYOTA; METAZOA; CHORDATA;
HOMO SAPIENS
                     CHEMOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATARRHINI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                      SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       PFAM; PF00048; 118;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE=BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                    NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MIYAKAWA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATSURAGI S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SHIZUKA K.,
                                                                                                                                                                                                          65 QVCADPSEEWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72
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                                                                                                                                                                                    EICADPKQKWVQ
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                                                                                                                                                                                                                                                               Similarity 58.3%; 7; Conservative
                     EXODUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97
                                                                                                                                                                                                                                                                                                                                         80 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HOMINIDAE;
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AA;
(HUMAN)
                                                                                                                                                                                                                                                                                                                                                           17
17
80
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                                                                                                                                                                                        12
                                                                                                                                                                                                                          76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24
97
11131 MW;
                                                                                                                                                                                                                                                                                  74.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      75.3%;
72.7%;
                                                                                                                                                                                                                                                                                                                                                                               >80
>80
                                                                                                                                                                                                                                                                                                                                         8857 MW;
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                                     803,
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                                 CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
                                                                                                                                                                                                                                                           Score 72; DB 4; L
Pred. No. 4.19e-03;
3; Mismatches 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 73;
Pred. No.
0; Misma
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LYMPHOTACTIN.
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NOMIYAMA H., ]
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2.56e-03;
-hes 3;
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Best Local S
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                                                                   O15467 PRELIMINARY;
O15467;
O15467;
O1-7AN-1998 (TREMBLREL 05, C
O1-JAN-1998 (TREMBLREL 05, L
O1-NOV-1998 (TREMBLREL 08, L
IL-10-INDICIBLE CHEMOXINE, ILLINCK OR SCYA16,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "A novel rat CC chemokine, iden display, is upregulated in brai J. NEUROIMMUNGL. 0:0-0(1998). EMBL; U90447; G1899246; ---
EMBL; AF053312; G3551817; ---
PFAM; PF00048; i18; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P97884
PPELIMINARY;
P97884;
01-MAY-1997 (TREMBLREL. 03, C
01-WAY-1998 (TREMBLREL. 03, L
01-WOV-1998 (TREMBLREL. 08, L
CC CHEMOKINE EXODUS.
RATTUS NORVEGICUS (RAT).
EUKARYOTA; METAZOA; CHORDATA;
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BLOOD 89:3315-3322(1997).
EMBL; U64197; G1778717;
PROSITE; PS00472; SMALL_CYTOKINES_CC;
PFAM; PF00048; i18; 1.
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MEDLINE; 97275143.
HROMAS R., GRAY P.W.,
BELL G.I., TAKEDA J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
STRAIN-FISHER 344;
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          EUKARYOTA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-FISHER 344; TISSUE-BRAIN; UTANS-SCHNEITZ U., LOREZ H., KLINKERT W.E.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUBMITTED
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CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SCIUROGNATHI; MURIDAE; MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LESSLAUER W.;
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les 8; Conser
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          METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96 AA;
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llarity 80.0%;
Conservative
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larity 70.08;
Conservative
                                    (HUMAN)
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CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
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NE; MURINAE; RATTUS.
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brain inflammation.";
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Pred. No. 4.19e-03;
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Pred. No. 4.19e-03
2; Mismatches
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A BANKS.
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BROXMEYER H.E.,
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Best Local
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093238 PRELIMINARY;
093238;
01-NOV-1998 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                  CC CHEMOKINE-1.

CYPRINUS CARPIO (COMMON CARP).

BUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ACTINOPTERYGII; NEOPTER
TELEOSTEI; EUTELEOSTEI; OSTARIOPHYSI; CYPRINIFORMES; CYPRINOIDEA;
CYPRINIDAE; CYPRININAE; CYPRINUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                 SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA EMBL; AB010469; D1032417; -. SEQUENCE 101 AA; 11266 MW; 9CFBD540 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATARRHINI; HOMINIDAE; HOMO [1]
                                                                                                                                                                                                                                                                                                                                                          FUJIKI
                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                CDNA cloning of a carp CC chemokine homologous to mammalian
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                                                                                                                            72 EFCSDPKLRWV
                                                                                                                                                                                      Local Similarity
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L; U91746; G2581781; -.
L; ABB07454; D1024963; -.
L; AF088219; G3719365; -.
L; AF055467; G3395776; -.
                                                                                 EICADPKQKWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EICADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PF00048; il8;
                                                                                                                                                                                                                                                                                                                                                        NAKAO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and characterization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KWON B.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ZHANG S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      72.2%;
llarity 50.0%;
Conservative
  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                     Conservative
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                                                                                                                                                                                    71.1%;
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                                                                                                                                                                                                                                                                                                                                                        SHIN D., YANO T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BROXMEYER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08, CREATED)
08, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
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EMBL/GENBANK/DDBJ DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FUKUDA S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 70;
Pred. No. :
5; Mismat
                                                                                                                                                                                    Score 69; DB 13;
Pred. No. 1.79e-02;
  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Η.Ε.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A079DF66 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of LMC, a nov
CC chemokine,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      247:217-222(1998).
                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101
91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 4; L
1.11e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a novel lymphocyte and
kine, with myelosuppres
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 120
                                                                                                                                                                                                          Length 101;
                                                                                                                                                                                                                                                                                            BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FRASER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BANKS
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                                                                                                                                                                 Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IMAI
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RESULT 14

ID 062812;
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DI 01-BUG-1998 (
DE INTERLEUKIN-8

GN IL-8.
GN EQUENCE FROM RC TISSUE-BRONCH
RA FRANCHINI M.;
RL SUBMITTED (AP BENE)
RE EMBL; AF06237
FT NON_TER
SO SEQUENCE 97
   RESULT
AC QO
DT 00
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Best Local
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Best Local :
                                                                                                                                                                       Matches
                                  ULT 15
098158 PRELIMINARY;
098158; 012569;
01-FEB-1997 (TREMBLREL. 0:
01-JUL-1997 (TREMBLREL. 0:
01-NOV-1998 (TREMBLREL. 0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           043646;
01-JUN-1998 (
01-JUN-1998 (
01-NOV-1998
ORF K6.
KAPOSI'S SARCOMA-ASSOCIATED
VIRUSES; DSDNA VIRUSES, NO R
                                                                                                                                                                                                                                                                                                           IL-8.
EQUUS CABALLUS (HORSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                           FRANCHINI M.;
                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                       PERISSODACTYLA;
                                                                                                                                                                                                                                                                                                                                                   INTERLEUKIN-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL.
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SUBMITTED (JAN-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS00472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                      SSUE-BRONCHOALVEOLAR TISSUE;
                                                                                                                                              75 EVCLNPHTKWVQ 86
                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       71 QVCANPEKKWVR
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1 EICADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                    μ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                   EICADPKQKWVQ
                                                                                                                                                                                                                           TTED (APR-1998) TO EMBL/GENBANK/DDBJ DATA AF062377; G3126973; -. ER 97 97
                                                                                                                                                                               70.18;
Similarity 58.38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity 6; Conser
                                                                                                                                                                                                               97 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TREMBLREL.) (TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           91 AA;
                                                                                                                                                                                                                                                                                                                                                           (TREMBLREL. 07, CREATED)
(TREMBLREL. 07, LAST SEQUENCE UPDATE)
(TREMBLREL. 07, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24
                                                                                                                                                                                                                                                                                                                                                   (FRAGMENT)
                                                                                                                                                                                                                                                                                                       EQUIDAE;
                                                                                                                           12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                 10742 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        70.1%;
50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9990 MW;
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                                   04,
08,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           866
                                                                                                                                                                                                                                                                                                       EQUUS
                                 , CREATED)
, LAST SEQUENCE UP
, LAST ANNOTATION
                                                                                                                                                                               Score 68;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 68; DB 4; 1
Pred. No. 2.89e-02
4; Mismatches
             HERPESVIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RANTES.
CF404FAD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               POTENTIAL.
                                                                               PRT;
                                                                                                                                                                                                               00396FBF CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    containing five CC chemokine BANK/DDBJ DATA BANKS.
                                                                                                                                                                    Mismatches
                                                                                                                                                                                No. 2.89e-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>س</u>
                                                                               95
                                                                                                                                                                                                                                                                                                                                                                                                       97
   HERPESVIRIDAE
                                                                                                                                                                                          DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                       ₽
                                  ON UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DATA BANKS
                                                                                                                                                                                                                                                                                                               MAMMALIA; EUTHERIA;
                                                                                                                                                                                          Length 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2; Indels
                                                                                                                                                                                                                                                BANKS
                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   91;
                                                                                                                                                                     0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              genes.";
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RESULT
ID 05
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ROS MU
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CC SC
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RX ME
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 69.1%;
Best Local Similarity 58.3%;
Matches 7; Conservative
                                                                                              01-JUN-1998 (TREMBLREL. 06, CR
01-JUN-1998 (TREMBLREL. 06, LA
01-NOV-1998 (TREMBLREL. 08, LA
B LYMPHOCYTE CHEMOATTRACTANT B
MUS MUSCULUS (MOUSE).
EUKARYOTA, METAZOA; CHORDATA;
SCIUROGNATH; MURIDAE; MURINAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUN R., LIN S.-F., MILLER G.
SUBMITTED (SEP-1996) TO EMBL
EMBL; U75698; G1718266; -.
EMBL; U74885; G1658273; -.
EMBL; U93872; G2246546; -.
EMBL; U91366; G3551763; -.
PFAM; PF00048; 118; 1.
HYPOTHETICAL PROTEIN.
SEQUENCE 95 AA; 10485 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     [6]
SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE; 97296220.
NEIPEL F., ALBRECHT J.C., FLECKENSTEIN B.;
NEIPEL F., ALBRECHT J.C., FLECKENSTEIN B.;
"Cell-homologous genes in the Kaposi's sarcoma-associated
"Cell-homologous genes in the Kaposi's sarcoma-associated
"Cell-homologous genes in the Kaposi's sarcoma-associated
"Cell-homologous genes in the Kaposi's sarcoma-associated";";
                                                                                                                                                                                                                                                                      O55038;
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MEDLINE; 97094384.

MOORE P.S., BASHOFF C., WEISS R.A., CHANG Y.;

"MOlecular mimicry of human cytokine and cytokine response pathway
genes by KSHY.";
                         SEQUENCE FROM N.A. STRAIN-C57BL/6J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RUSSO J.J., PARRY J.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. NICHOLAS J., RUVOLO V. HENDRICKSON S., GUO H. SUBMITTED (NOV-1996) T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P. SUBMITTED (OCT-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 97121480.
RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE "Nucleotide sequence of the Kaposi sarcoma-associated (HHY8).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              genes by KSHV.";
SCIENCE 274:1739-1744(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUBMITTED (MAY-1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
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  MEDLINE; 98146056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROC. NATL. ACAD. SCI.
                                                                                                                                                                                                                                                                                                                                                                                           EQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P. MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                12
                                                                                                                                                                                                                                                                                                                                                                                                                                              85
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                                                                                                                       CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               V.R., BURNS W.H., SANDFORD G., WARDER, HAYWARD G.S., REITZ M.S.;
TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               U.S.A.
                                                                                                   MURINAE;
                                                                                                                                                                  06, CREATED)
06, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDAT
CTANT BLC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 67; DB 14;
Pred. No. 4.65e-02;
3; Mismatches 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93:14862-14867(1996).
                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5283348D CRC32;
                                                                                                   Spw
                                                                                                                                                                                                                                                                                               109
                                                                                                                                                                                                                                                                                               A
                                                                                                                       MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 J., YAN M.,
Y., MOORE P.
                                                                                                                                                                                              UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 95
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                                                                                                                       EUTHERIA;
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.S.;
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                                                                                                                       RODENTIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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Best Local Similarity
Matches 6; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                      ULT 18
000626 PRELIMINARY;
000626; (TREMBLREL 04, CI
01-JUL-1997 (TREMBLREL 04, LI
01-NOV-1998 (TREMBLREL 08, LI
                                                                                      MACROPHAGE-DÉRIVED CHEMOKINE PRECURSOR.
MDC OR A-152E5.1.
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "A B-cell-homing chemokine made Burkitt's lymphoma receptor-1."; NATURE 391:799-803(1998).
EMBL; AF044196; G2911374; -. SEQUENCE 109 AA; 11927 MW; B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GUNN M.D., NGO
WILLIAMS L.T.;
                                                                   CATARRHINI; HOMINIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; U91835; G1899259; -. EMBL; U84487; G1888523; -. EMBL; AC004382; G3252821; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J., BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.; "Homo sapiens Chromosome 16 BAC clone CIT987SK-A.152E5."; SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BAZAN J.F., BACON K.B., HARDIMAN G., WANG W., SOO K., GREAVES D.R., ZLOTNIK A., SCHALL T.J.;
"A new class of membrane-bound chemokine with a CX3C NATURE 385:640-644(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CX3C CHEMOKINE PRECURSOR.
A-152E5.2.
GODISKA R.,
                         SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                    73 FCADPKEQWV 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          74 ICVNPRAKWLQ 84
                                                                                                                                                                                                                                                                                                                                                                 2
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CHANTRY D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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397
42202
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54.5%;
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                                                                   HOMO.
RAPORT C.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MW;
                                                                                                                                                                          CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 67; DB 4; I
Pred. No. 4.65e-02;
2; Mismatches 1
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Pred. No. 4.65e-02;
3; Mismatches 2
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LAST ANNOTATION UPDATE)
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CX3C CHEMOKINE.
; C8093D7D CRC32;
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                                                                                      VERTEBRATA; MAMMALIA;
                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BB6CCC22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  lymphoid follicles activates
SOZZANI S.,
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ALLAVENA
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
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                                                                                      EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUTHERIA; PRIMATES;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
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RESULT 20
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Best Local Similarity 58.3%;
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 8; Conser
                                                                                                                                                                                                                                                                                                                                                                                                  O19006; PRELIMINARY; O09006; O19006; O1-JUL-1997 (TREMBLREL. O1-JUL-1998 (TREMBLREL. O1-NOV-1998 (TREMBLREL. O1-RETA CHEMOKINE EXODUS-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHANG M.S., MC. BOONE T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHAIN
SEQUENCE
                                                                                                                                                                                                                                                                                                                                              MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MENG T., B
SUBMITTED
                                                                                                                                                                                                                                                          MEDLINE; 97444139.

HROMAS R., KIM C.H., KLEMSZ M., KRATHWOHL M., FIFE K., COO SCHUZLEIN-BICK C., BROXMEYER H.E.;

"Isolation and characterization of Exodus-2, a novel C-C c "Isolation and characterization carboxyl-terminal extension.";

with a unique 37-amino acid carboxyl-terminal extension.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J.,
BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.;
"Homo sapiens Chromosome 16 BAC clone CIT987SK-A-152E5.";
SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U83239; G2062425; -.
                                                                                                                                                          SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS EMBL; U88322; G3165697; -... MGDJ, MGJ11097677, SCYAZ1.
PFAM; PF00048; 118; 1.
                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                       TISSUE-TOTAL FETUS; HROMAS R.A.;
                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. TISSUE-TOTAL FETUS;
                                                                                                                                                                                                                                                                                                                                                                                           SCYA21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    74 EICADPRVPWV
                                                                             73 ELCANPEEGWVQ 84
                                                         \vdash
                                                                                                                                                                                                                                                   IMMUNOL. 159:2554-2558(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 EICADPKQKWV 11
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                                                         EICADPKQKWVQ
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BOONE T., ANDREW D.P.;
(JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93
                                                                                                                                                 133 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25
AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68.0%;
ilarity 72.7%;
Conservative
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185:0-0(0).
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93
10580
                                                                                                                                                  14600 MW;
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                     Pred.
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Pred. No. 7.45e-02;
1; Mismatches 2
                                                                                                                          Score 66;
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MACROPHAGE-DERIVED CHEMOKINE
65EA63D2 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                 B34A5E22 CRC32;
                                                                                                                                                                                                                                                                         of Exodus-2, a novel C-C chemokine
                                                                                                     Mismatches
                                                                                                               No. 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                            133
                                                                                                                           DB 11;
                                                                                                               .45e-02;
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                                                                                                                           133;
                                                                                                                                                                                                                                                                                                COOPER S.,
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PRELIMINARY;

PRT;

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Best Local S
Matches
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Best Local
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ULT 22
043927
043927;
01-JUN-1998
01-JUN-1998
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Q99126
Q99126;
Q1-NOV-1996
Q1-NOV-1996
Q1-NAY-1997
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01-JUL-1997
01-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHITIN SYNTHETASE I.
CHS1.
USTILAGO MAYDIS (SMUT FUNGUS).
EUKARYOTA; FUNGI; BASIDIOMYCOTA;
                                                                                                                                                                                                                                                                                           XGTRAIN=RK32 (A2B3);

XOCONGSTLE-CAZARES B., LEON-RA

XOCONGSTLE-CAZARES B., LEON-RA

MICROBIOLOGY 142:377-387(1996)

EMBL; X87748; G861151; -.

SEQUENCE 760 AA; 85181 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HEDRICK J.A., ZLOTNIK A.;
SUBMITTED (MAY-1997) TO EMBL,
EMBL; AF006537; G2209189; -.
EMBL; AF001980; G2624927; -.
MGD; MGI:1097677; SCYA21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.

TISSUE-THYMUS;

TANABE S., LU Z., LUO Y., QUACKENBUSH E.J., BERMAN M.

TANABE S., LU Z., LUO Y., REILLY C., LO D., JACOBS K

COLLINS-RACIE L.A., MI S., REILLY C., LO DATA BANKS.

SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Identification and characterization containing six conserved cysteines.", IMMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MUS MUSCULUS
                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                    USTILAGINOMYCETIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM
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                                                                                                                                        EICADPKOKW
                                                                                                                                                                 EICAETKGKW 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EICADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PF00048; i18;
NCE 133 AA;
                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        J.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97400322.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JS (MOUSE).
METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (TREMBLREL. 04, CREATED)
(TREMBLREL. 04, LAST SEQUENCE UPDATE)
(TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      68.0%;
llarity 58.3%;
Conservative
(TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                           PRELIMINARY;
                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MURIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZLOTNIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14558 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                    USTILAGINALES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A
                                                                                                                                                                                                                                                                                                                                                        LEON-RAMIREZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3,1°
  96,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A21 (TCA4).
                                                                                                                                                                                                                                  Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
CREATED)
LAST SEQUENCE UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 66; DB 11; Le
Pred. No. 7.45e-02;
3; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERTEBRATA;
                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                             2F24C4C9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C0532523
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                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                  USTILAGINOMYCETES;
ES; USTILAGINACEAE;
                                                                                                                                                                                                                                  64; DB 3;
No. 1.89e-01
                                                                                                                                                                                                                                                                                                                                                      <u>ი</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of
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                                                           109
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LO D., JACOBS K.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ø
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                                                                                                                                                                                                                                                                                             CRC32
                                                                                                                                                                                                                                                                                                                                                        RUIZ-HERRERA
                                                           A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MAMMALIA;
                                                                                                                                                                                                                                                      Length 760;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 133;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   beta
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                                                                                                                                                                                                                                                                                                                                                                                                                                    USTILAGO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     chemokine
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Best Local
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O83516; O83516; O7500 (TREMBLREL 08, CI
01-NOV-1998 (TREMBLREL 08, LI
01-NOV-1998 (TREMBLREL 08, LI
01-NOV-1998 (TREMBLREL 08, LI
01-NOV-1998 (TREMBLREL 08, LI
                                                                                                                                                                                                                   SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
SEQUENCE FROM STORE

REDLINE; 9832770.

FRASER C.M., NORRIS S.J., WEINSTOCK G.M., WHITE O., SUTTON G.G.,

FRASER C.M., MORRIS S.J., WEINSTOCK G.M., WEITENSON J.,

DODSON R., GWINN M., HICKEY E.K., CLAYTON R.J., ETCHUM S., PETERSON J.,

SODERGREN E., HARDHAM J.M., MCLEOD M.P., SALZBERG S., PETERSON J.,

SODERGREN E., HARDHAM J.M., MCLEOD M.P., SALZBERG M., UTTERBACK T.

KHALAK H., RICHARDSON D., HOWELL J.K., CHIDAMBARAM M., UTTERBACK T.

MCDONALD L., ARTIACH P., BOWMAN C., COTTON M.D., EUJII C., GARLAND

MCDONALD L., ARTIACH P., BOWMAN C., COTTON M.D., EUJII C., GARLAND

MCDONALD L., ARTIACH P., BOWMAN C., COTTON M.D., SWITH H.O.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE; 98146056. GUNN M.D., NGO V.N. WILLIAMS L.T.;
SEQUENCE FROM N.A.

FRASER C.M., NORRIS S.J., WEINSTOCK G.M., WHITE O., SUTTON G.G.,

DODSON R., GWINN M., HICKEY E.K., CLAYTON R., KETCHUM K.A.,

SODERGREN E., HARDHAM J.M., MCLEOD M.P., SALZBERG S., PETERSON J.,

KHALAK H., RICHARDSON D., HOWELL J.K., CHIDAMBARAM M., UTTERBACK T

KHALAK H., RICHARDSON D., HOWELL J.K., CHIDAMBARAM M., UTTERBACK T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIGNAL
CHAIN
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SUBMITTED (CCT-1997) TO EMBL,
EMBL; AJ002211; E1249325; -.
EMBL; AF044197; G2911376; -.
EMBL; AF029894; G3169814; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "A B-cell-homing chemokine made
Burkitt's lymphoma receptor-1.";
NATURE 391:799-803(1998).
                                                                                                                                                                                          Spirochete
                                                                                                                                                                                                                                                                                                                                                                                                                                                           BACTERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TREPONEMA PALLIDUM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HYPOTHETICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "B cell-attracting chemokine 1, lymphoid tissues, selectively at J. EXP. MED. 187:655-660(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BAGGIOLINI M., MOSER B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. MEDLINE; 98130629.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CATARRHINI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-NOV-1998 (TREMBLREL CXC CHEMOKINE PRECURSOR
                                                                                                                                                                      SCIENCE
                                                                                                                                                                                                               "Complete Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A
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Similarity 45.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           SPIROCHAETALES;
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23
109 7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NGO V.N.,
                                                                                                                                                                      375-388(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HOMINIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ã,
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                                                                                                                                                                                                            Sequence of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         G., GAETANO C., CAPOGROSSI C.M.;
EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           SPIROCHAETACEAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 K.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STUBER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LAST SEQUENCE LAST ANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LAST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 60; DB 4; I
Pred. No. 1.16e+00;
                                                                                                                                                                                                            Treponema pallidum,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         POTENTIAL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERTEBRATA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ₿
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      UPDATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLARK-LEWIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TREPONEMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  UPDATE)
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Best Local :
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Q68409;
Q68409;
Q1-NOV-1996;
Q1-NOV-1996;
Q1-NOV-1998
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067634;
01-NOV-1996
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01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
ECO Q PROTEIN (FRAGMENT).
GALLID HERBERGYYMAN.
                                                                                            CHA T.A., TOM E., KEMBLE G.W., DUKE G.M., MOCARSKI E.S., SPAETE R.R.; White control of the contr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  with MDV.";
VIROLOGY 213:590-599(1995).
EMBL; U34966; G1185444; -.
PFAM; PF00048; 118; 1.
NON_TER 1 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Isolation and characterization of Marek's disease virus (MDV) cDNAs mapping to the BamHI-I2, BamHI-Q2, and BamHI-L fragments of the MDV genome from lymphoblastoid cells transformed and persistently infected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GALLID HERPESVIRUS TYPE 1.
VIRUSES; DSDNA VIRUSES, NO RNA STAGE;
ALPHAHERPESVIRINAE; VARICELLOVIRUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUBMITTED (MAR-1998) TO ELEMBL; AE001226; G3322795; HYPOTHETICAL PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                    VIRUSES; DSDNA VIRUSES, CYTOMEGALOVIRUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORF UL154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PENG Q., ZEI
SHIRAZI Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HATCH B., F
                                                                                                                                                                                                                                                          MEDLINE; 96099416.
                                                                                                                                                                                                                                                                                           STRAIN=TOWNE;
                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   HUMAN CYTOMEGALOVIRUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 96074534.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     145 VCVDPEAPWVQ 155
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HORST K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             203 AA; 23132 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              187 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (TREMBLREL.
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larity 63.6%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60.8%;
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   60.8%;
                                                                 45181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21410 MW;
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                                                                 WW;
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Pred. No.
   Score 59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 59; DB 14;
Pred. No. 1.80e+00;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                               STAGE;
                                                              79B5D103 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             887D04C3 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                  HERPESVIRIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HERPESVIRIDAE
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1.80e+00;
   DB 14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.
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Length 399;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 203;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                  BETAHERPESVIRINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NONOYAMA M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
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RESULY 26

ID 93290;
AC 93290;
AC 93290;
DT 01-FEB-1
DT 01-JAN-1
DT 01-WOV-1
DE HYPOTHET
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Best Local :
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Matches 4; Conservative
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084834; PRELIMINARY;

084834; (TREMBLREL. (

01-NOV-1998 (TREMBLREL. (

01-NOV-1998 (TREMBLREL. (
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01-JAN-1998
01-NOV-1998
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                                                           "Genome Sequence of an Chlamydia trachomatis." SCIENCE 0:0-0(1998).
                                                                                                                                                                                            STEPHENS R.S., KALMAN S
                                                                                                                                                                                                                                                                  STRAIN-D/UW-3/CX;
                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                      CHLAMYDIA
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EMBL; Z80214; E347995; -.
HYPOTHETICAL PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WILSON R., AINSCOUGH R., ANDERSON K., BAYNES C., BERKS M., BONFIELD J.,
BURTON J., CONNELL M., COPSEY T., COPPER J., COLLSON A., CRAXTON M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE; 94150718.
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EUKARYOTA; METAZOA; NEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HYPOTHETICAL
SEQUENCE FROM N.A.
                                                                                                                                                                DAVIS R.W.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188 VCPEAKQWWTQ 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               308 VCEEPKHEW 316
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 ICADPKQKW 10
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Similarity 45.5%;
                                                                                                                                                                                                                                                                                                                                                                   CHLAMYDIALES;
                                                                                                                                                                                                                                                                                                                                                                                                      TRACHOMATIS
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(TREMBLREL. 08
IDE REDUCTASE,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
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                                                                                                                                                                                            S., LAMMEL C.
R L., TATUSOV
                                                                                                                             Obligate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              862
                                                                                                                                                                                                                                                                                                                                                                   CHLAMYDIACEAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08, CREATED)
08, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
E, LARGE CHAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL/GENBANK/DDBJ
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RHABDITIDAE; PELODERINAE; CAENORHABDITIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ¥.
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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3; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 58; DB 5; 1 Pred. No. 2.79e+00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4;
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                                                                                                                             Intracellular Pathogen of Humans:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                            .J., F2
R.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1053 AA
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                                                                                                                                                                                               FAN J.,
                                                                                                                                                                                                                                                                                                                                                                   CHLAMYDIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DATA
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                                                                                                                                                                                               MARATHE R.,
2., KOONIN E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    chromosome III of
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  Query Match 58.8% Best Local Similarity 66.7% Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
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Best Local Similarity
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070460;
070460;
01-AUG-1998 (TREMBLREL 07, CREATED)
01-AUG-1998 (TREMBLREL 07, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL 07, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL 07, LAST ANNOTATION UPDATE)
EBI-1 LIGAND CHEMOKINE.
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-D/UW-3/CX;
STEPHENS R.S., KALMAN S., LAMMEL C.J., FAN J., MARATHE R., MITCHELL W.P., OLINGER L., TATUSOV R.L., ZHAO Q., KOONIN E. DAVIS R.W.;
SUBMITTED (MAY-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AE001355; G3329297; -.
SEQUENCE 1053 AA; 120168 MW; 781C1449 CRC32;
                                                                                                                      EU ARABIDOPSIS SEQUENCING PROJECT, ESSA; SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA EMBL; Z97342; E327026; -.
                                                                                                                                                                                                                                         BEVAN M., STIEKENA W., MURPHY G., WAMBUTT R., POHL T., TI
KREIS M., KAVANAGH T., ENTIAN K.D., RIEGER M., JAMES R.,
PUIGDOMENECH P., HATZOPOULOS P., OBERNAIER B., DUESTERHOI
JONES J., PALME K., ANSORGE W., DELSENY M., BANCROFT I.,
SCHUELLER C., CHALWATZIS N.;
SUBMITTED (JUL-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JAN-1998 (TREMBLREL.
01-JAN-1998 (TREMBLREL.
01-AUG-1998 (TREMBLREL.
RESISTANCE GENE HOMOLOG.
                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                      ARABIDOPSIS THALIANA (MOUSE-EAR CRESS).

EUKARYOTA; VIRIDIPLANTAE; CHAROPHYTA/EMBRYOPHYTA GROUP; EMBRYOPHYTA;

IRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA;

EUDICOTYLEDONS; ROSIDAE; CAPPARALES; BRASSICACEAE; ARABIDOPSIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE=LYMPHOID;

MGO V.N., TANG H.L., CYSTER

MGO V.N., GO-0(1998).

J. EXP. MED. 0:0-0(1998).

EMBL; AF059208; G3068765; -

SEQUENCE 108 AA; 11911 M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
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                                                                                                                                                                                                 SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      73 QLCAPPDQPWVD 84
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                                                                                                  192 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
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                                                                                                  E327026; -.
2 AA; 21535
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                         58.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05,
07,
                                                                                                  MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 57;
Pred. No.
3; Misma
  Score 57; DB 10;
Pred. No. 4.30e+00;
2; Mismatches 1
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Pred.
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                                                                                               7BD51863 CRC32;
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2.79e+00;
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                                               Length 192;
                                                                                                                                                                                                                                                                                                                  JAMES R.,
DUESTERHOFT A.
                                                                                                                                               BANKS
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  Indels
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                                                                                                                                                                                                                                                                                            MEWES H.W.,
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  Gaps
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                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                   Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ALLEN E.E.;
SUBMITTED (MAY-1995) TO EM
SUBMITTED (27443; G1495977; -.
PFAM; PF00516; GP120; 1.
PFAM; PF00517; GP41; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 96190564.

GAO F., MORRISON S.G., ROBERTSON D.L., THORNTON C.L., CRAIG S., KARLSSON G., SODROSKI J., MORGADO M., GALVAO-CASTRO B., BRIESEN H., BEDDOWS S., WEBER J., SHARP P.M., SHAW G.M., HAHN B.H.;

BEDDOWS S., WEBER J., SHARP P.M., SHAW G.M., HAHN B.H.;

"Molecular cloning and analysis of functional envelope genes from human immunodeficiency virus type 1 sequence subtypes A through G. WHO and NIAID Networks for HIV Isolation and Characterization.";

J. VIROL. 70:1651-1657(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TLT 30
Q97013
Q97013;
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SEQUENCE
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01-FEB-1997 (TREMBLREL 02, LAST
01-NOV-1998 (TREMBLREL 08, LAST
ENVELOPE GLYCOPROTEIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VIRUSES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HUMAN IMMUNODEFICIENCY VIRUS TYPE 1 (HIV-1).
VIRUSES; RETROID VIRUSES; RETROVIRIDAE; LENTIVIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                              ENVELOPE PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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                                                                                                                   ICADPKQKWV
                                                                                                                                                                                                                                                                                      Similarity
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                                                                                                                                                                                                                                                                                                                                                                                   859 AA;
                                                                                                                                                                                                                                                     Conservative
                                                                                                                          11
                                                                                                                                                                                                                                                                                   58.8%;
                                                                                                                                                                                                                                                                                                                                                                               1
97274 MW;
                             07:23:54 1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                               Score 57;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
                                                                                                                                                                                                                                                                                                                                                                                   15339DB3 CRC32;
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                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                           DB 14; Len
4.30e+00;
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Provided States of McP-1

Continued to McP-1

Continued States of McP-1

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Best Local
                            lung disease.
Homo sapiens.
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20-DEC-1996.
19-JUN-1995; CA-152141.
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Homo sapiens.
CA2152141-A.
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                                                                                                                                                                                                                                                                    Monocyte chemoattractant protein analogue MCP-1 (11-76). Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; chronic inflammatory disease; arthritis; arteriosclerosis;
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19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
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Similarity 100.0%;
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Pred. No. 6.
0; Mismatc
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. No. 6.67e-02;
Mismatches 0; Indels
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Human SDF-1-alpha.
Human SDF-1-beta.
Human chemokine MIP-3
Human chemokine beta4
Human chemokine beta-
Interleukin-8/NAP-1.
Amino acid sequence o
Human neutrophil chem
                                                                                                                                                                                                                                                                                                    allergy;
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AC W13597;
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PT anti-inflammatory agent
PT anti-inflammatory agent
CC chemoattractant protein-1 (MCP-1). The analogue, MCP-1 (9-76), of monocyte
CC chemoattractant protein-1 (MCP-1). The analogue, which lacks the
CC N-terminal amino acids 1-8 of MCP-1, acts as an antagonist of MCP-1
CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1
CC creceptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration
CC of monocytes and other cells e.g. basophils and lymphocytes into
CC inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
CC diseases. The analogue competes more effectively with MCP-1 for binding
CC MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably
CC with 75:1 for prior art mutant 7ND.
Sequence 68 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 5; 27pp; English.

Disclosure; Page 5; 27pp; English.

Chemoattractant protein-1 (MCP-1). The analogue, which lacks the chemoattractant protein-1 (MCP-1). The analogue, which lacks the N-terminal amino acids 1-10 of MCP-1, acts as an antagonist of MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammation sites. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared country art mutant value.
                                   Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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Best Local
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WPI; 97-165844/16.
N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) -
lacks MCP-1 activity and inhibits receptor binding, useful as
anti-inflammatory_agent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (LEWI/) LEWIS I.
Gong J. Lewis I;
WPI; 97-165844/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
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20-DEC-1996.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-NOV-1997 (first entry)
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||||||||||
1 CADPKQKWVQ
   Match 100.0%; Local Similarity 100.0%; nes 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      / Match 100.0%;
Local Similarity 100.0%;
nes 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67 AA;
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Pred.
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Score 84; DB 24;
Pred. No. 6.67e-02;
0; Mismatches 0
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. 6.67e-02;
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                                                               Length 68
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Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations substitution of 28 Tyr by aspartate; (2) substitution of 28 Tyr by aspartate; (2) substitution of 3-Asp by Ala; and/or (4) deletion of anino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 1
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anti-inflammatory agent anti-inflammatory agent Claim 5; Page 5; 27pp; English.

The present sequence represents an analogue, MCP-1 (8-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the N-terminal amino acids 1-7 of MCP-1, acts as an antagonist of MCP-1
                                                                                                                                                                                                                                                                                                        LT 5
W13596 standard; peptide;
W13596;
07-NOV-1997 (first entry)
                                                                                                                                                                                                                                           Monocyte chemoattractant protein analogue MCP-1 (8-76). Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                               Gong J, Lewis I; WPI; 97-165844/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-MAY-1995.
07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R87678;
21-FEB-1996
                                                                                N-terminally truncated monocyte chlacks MCP-1 activity and inhibits
                                                                                                                                                        20-DEC-1996.
19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
                                                                                                                                                                                                 Homo sapiens.
CA2152141-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                des(2-8) MCP-1
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                                                                                                                                         (LEWI/) LEWIS I.
                                                                                                                                                                                                                                 lung disease.
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                                                                                                                                                                                                                                                                                                                                                                                            CADPKQKWVQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                h 100.0%;
Similarity 100.0%;
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69 AA;
                                                                                                                                                                                                                                                                                                      (first entry)
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d. No. 6.67e-02;
Mismatches 0;
                                                                                chemo:attractant protein-1
ts receptor binding, useful
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                                                                                   (MCP-1)
                                                                                                                                                                                                                                                         allergy;
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WO9409128-A.
28-APR-1994; U10074.
20-OCT-1993; US-965678.
(MCCW ) MALLINCKRODT MEE
Lyle LR;
WPI; 94-151314/18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Wound treatment using monocyte chemotactic factor - has potent therapeutic effect on skin wounds and ulcers Disclosure; Page 12; 22pp; Japanese.
The invention relates to a new remedy for curing wounds which, instead of comprising a growth factor, comprises a monocyte chemotactic activating factor (MCAF) or its variants or derivatives. The factor has potent effect on skin wounds and ulcers. The present sequence is human MCAF, the activity of which is exemplified as the new remedy. Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block the effects of McP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammation sites. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared with 75:1 for prior art mutant 7ND. Sequence 69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R53398 standard; Protein;
R53398;
15-DEC-1994 (first entry)
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Matsushima K, Naruto M;
WPI; 95-131181/17.
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monocyte chemotactic activating
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R87680 standard; protein;
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W09507710-A1.
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05-MAR-1996
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13-SEP-1993; JP-227385.
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Pred. No. 6.67e-02;
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W0219737-A.
12-NOV-1992.
27-APR-1992; J00550.
09-MAY-1991; JP-135950.
(DAIN ) DAINIPPON PHARM CO LTD.
FUKUI T, Matsuo N, Yamada M, Yamagishi J;
WPI; 92-398864/48.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             An expression plasmid, pHM483, for producing MCF(76) consisting of 76 amino acids was constructed. The prod. can be used for e. treating bacterial infectious diseases
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The sequences given in R53398-99 represent sense and antisense
                                                                                                                                                                               monocyte chemoattractant protein;
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R87677 standard;
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                                                                               modified_site
                                                                                                                                  HOMO
                                                                                                                                                                                                          21-FEB-1996 (first entry) (3-Ala) MCP-1.
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Best Local Similarity 100.0%;
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18-MAY-1995.
07-NOV-1994; U12874.
12-NOV-1993; US-15230
(DAND ) DANA FARBER CO
(DAND ) DANA FARBER CO
ROILINS B, Zhang VJ;
WPI; 95-215051/28.
                                            Anti-sense Monocyte Chemotactic Protein-1 oligo:nucleotide(s) useful for therapy or diagnosis of restenosis, etc.
Disclosure; Column 13-14; 16pp; English.
This is the amino acid sequence of the human monocyte chemoattractant protein (MCP)-1, a member of the C-C chemokine family. MCP-1 is a potent stimulator of monocyte chemotaxis and is produced by injured vascular smooth cells thus attracting monocytes and macrophages which infiltrate the injured area and release growth factor. This causes proliferation of the vascular smooth cells resulting in restenosis. The gene sequence can be used to generate antisense sequences e.g. T48093-7, which can be used to inhibit in vitro MCP-1 prodn. by mononuclear cells e.g. lymphocytes or macrophages, or smooth muscle cells, esp. in order to prevent vascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US5571713-A.
05-NOV-1996.
22-OCT-1992;
22-OCT-1992;
27-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LT 10
W09374 standard; Protein;
W09374;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Monocyte chemoattractant protein: 1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Ar by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989. The peptides can be used to prevent restenosis, e.g. in patients undergoing coronary artery angioplasty.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Monocyte chemotactic protein 1.

Human; monocyte chemoattractant protein; antisense; inhibition; mononuclear cell; lymphocyte; macrophage; smooth muscle cell;
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                                                                                                                                                                                                                                                                                                                                                                                                           N-PSDB; T48092.
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Kunkel SL, Lyle LR,
WPI; 96-505405/50.
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No. 6.67e-02;
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25-FEB-1997:
05-OCT-1992: 956862.
05-OCT-1992: US-956863.
05-OCT-1992: US-956862.
29-APR-1994: US-235659.
(MLCW) MALLINCKRODT MEDICAL INC.
(UNDI) UNIV MICHIGAN.
disulfide_bond 11...
disulfide_bond 12...
disulfide_bond 12...
W09513295-Al.
18-MAY-1995.
07-NOV-1994; U12874.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 10; Column 19-20; 15pp; English.
Will31 represents mature human monocyte chemoattractant protein-1
(MCP-1). MCP-1 was radionuclide labelled and used in a method for imaging a target site in vivo in an animal. Labelled MCP-1 was allowed to accumulate at a target site (having MCP-1 receptors) in the animal and detected so as to image the target site. Any Cys-Cys or Cys-Xaa-Cys chemokine carrying either iodine-123 or iodine-131 can be used in the method. Especially preferred is neutrophil activating peptide-2 (NAP-2) which recognises interleukin-8 receptors and is labelled with-18 technetium-99m, indium-111. copper-62, rhenium-186 or rhenium-188.
The method can be used for imaging a site of infection, inflammation, neoplasm, atheromatous lesion or restenosis.
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Mature human monocyte chemoattractant protein-1 (MCP-1).

MCP-1; mature chemoattractant protein-1; cytokine; interleukin-8;

MCP-1; neutrophil activating peptide; labelling; langing; targeting;

radionuclide; infection; inflammation; neoplasm; atheromatous lesion;
                                                                                                                                                                                                                                                                                                                                      (28-Asp) MCP-1.
monocyte chemoattractant protein; MCP-1; mutant; restenosis; angioplasty.
                                                                                                                                                                                                                               modified_site
                                                                                                                                                                                                                                                                                                        Homo sapiens.
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1 CADPKQKWVQ 10
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11..36
12..52
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d. No. 6.67e-02;
Mismatches 0;
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6.67e-02;
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CC Claim 3; Page 11; 22pp; English.

CC Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous CC MCP-1, provided that the derivative has not been modified by the CC substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations CC are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg CC are: (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino CC acids 2-8. The present sequence is a specifically claimed human MCP-1 CC derivative based on the parent protein disclosed in Rollins, Molecular CC and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

CC The peptides can be used to prevent restenosis, e.g. in patients CC undergoing coronary artery angioplasty.
                                                                                                                                                                                                        Query Match 100.0%
Best Local Similarity 100.0%
Matches 10; Conservative
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Best Local
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20-JUL-1989;
31-JAN-1989; US-304234.
31-JAN-1989; US-304234.
(USSH) US Dept. of Health an Yoshimura T; Robinson E; App WPI; 89-263501/36.
                                                                                                                                                                                                                                          neoplasms.
Disclosure; page 3; 46pp; English.
Disclosure; page 3; 46pp; English.
Peptide is derived from glioma cell line U-105MG (ATCC CRL9932)
leukocytes and has mol. wt. 8400. Used to treat infections and r
Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-NOV-1993; US-15
(DAND ) DANA FARBE
ROllins B, Zhang
WPI; 95-215051/28.
                          28-JAN-1993 (first entry)
Sequence of bovine P6 protein.
Monocyte chemoattractant; bovi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-JAN-1990 (first entry)
Peptide from human glioma cell line U-10
Glioma; leucocyte; chemotaxis; neoplasms.
                                                                        R26580 standard;
R26580;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P90292 standard; peptide;
P90292;
17-JAN-1990 (first entry)
                                                                                                                                                                                                                                                                                                                                         New peptide with specific chemotactic activity for monocytes from glioma or leucocyte cells, useful for treating infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        modified_site
               inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              y Match 100.0%;
Local Similarity 100.0%;
les 10; Conservative
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FARBER CANCER INST
                                                                                       Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /label= OTHER
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Appella E;
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                             bovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cell line U-105MG
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                             P6-derivative;
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6.67e-02;
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6.67e-02;
                                                                                                                                                                                                                                                                                                                                           for treating infections
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                                                                                                                                                                                                                                    Length 76;
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                                                                                                                                                                                                   Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis Claim 5; Page 11; 22pp; English.

Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 27 Tyr by aspartate; (2) substitution of 28-Tyr by Aspartate; (2) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.
                                                                              Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                       Matches
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Poly(A+)RNA from bull seminal vesicles was used to prepare a cDNA ir the expression vector lambda gtll. 1.5 x 10(5) cDNA clones were screened with a polyclonal anti-P6 antiserum of monospecific immunoglobulin G and six positives were identified. The insert of suitable cDNA clone, pH42, was cloned into pUC18 and sequenced. pH42 encodes the 11.114 Da precursor of P6. It is called Monocyte Chemoattractant (bMCP-1), which is a homologue of human (h)MCP-1. There is 72% overall AA sequence homology to hMCP-1 with the signal peptide showing 100% and the central region showing 89% homology. Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W09513295-A1.
18-MAY-1995.
07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND) DANA FARBER CANCER INST INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-JUL-1991; 125251.
31-JUL-1991; DE-125251.
(SCHA-) SCHAPER & BRUEMMER GMBH & CO
Gramm W, Lins E;
WPI; 92-293438/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   disulfide_bond disulfide_bond
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rollins B, Zhang
WPI; 95-215051/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R87676 standard;
R87676;
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                                                                                                                                                              Sequence
                                                                                                                                                                                     undergoing
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03-SEP-1992.
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52 cadpkqkwvq 61
                                                                        Match 100.0%;
Local Similarity 100.0%;
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                                                                                                                                                            coronary artery 76 AA;
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11..36
12..52
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein; 76 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ne protein homologous to human MCP-1 - for tumours, thrombosis, and immune reactions,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Arg in the native sequence is replaced by
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Pred. No. 6.
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No. 6.67e-02;
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Best Local (
                                                                                                                                    25-JUL-1989; ...
30-MAR-1989; US-330446.
30-MAR-1989; US-330446.
(USSH) US Dept. Health and H
YOShimura T, Robinson EA, Ap
WPI; 89-300683/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 5; 50pp; English.

This sequence represents the mature form of monocyte chemotactic protein-1 (MCP-1). MCD-1 is a member of the "C-C" family of chemoattractant cytokines or chemokines. It is a potent stimulator of monocyte chemotaxis and has an extemely high degree of specificity for this cell type. MCP-1 is produced by injured vascular smooth muscle cells and attracts the monocytes and macrophages which infiltrate the area, releasing growth factors and resulting in proliferation of vascular smooth muscle and restenosis. Nucleic acid molecules which are antisense to the MCP-1 mRNA may be used to inhibit translation of MCP-1 and so may be useful for inhibiting vascular restenosis, partic. following balloon angioplasty or a related process. The molecule may be radiolabelled to increase its therapeutic effect or for imaging areas of potential
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  UT 17
P95387 standard; protein; 99
P95387;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense; monocyte chemotactic protein 1; MCP-1; "C-C" family; chemoattractant cytokine; chemokine; monocyte; chemotaxis; vascular smooth muscle cell;
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  Human derived monocyte chemo-attractant peptide prods. -
glioma cell line U-105MG or peripheral blood mononuclear
Disclosure; fig 2; 66pp; English.
This is a human-derived monoyte chemo-attractant peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                   Human monocyte chemo-attractant peptide-1. Human monocyte chemo-attractant peptide; i
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                                                                                                             N-PSDB; N91337
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14-JAN-1994; US-182917.
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/product=MCP-1
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chemo-attractant peptide (MCP-1) sequence
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No. 6.67e-02;
                                                                                                                                                                Leonard
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26-JUL-1994; UO8207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
(UPJO) UPJOHN CO.
HOOGWERF AJ, Ledbetter SR;
WPF; 95-082239/11.
N-PSDB; Q85370.
                                                                    DE4125251-C.
03-SEP-1992.
31-JUL-1991;
31-JUL-1991;
(SCHA-) SCHAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Screening for opds. with anti-heparanase activity - by detecting inhibition of heparin or heparan sulphate degradation, potentially useful for treating arthritis, restenosis, cancer. Claim 13; Page 49; 60pp; English.

Purified heparanases, prepared under reducing conditions and activated with transglutaminase, are given in R70786-804. Most are prepared by reverse transcription of mRNA from activated human leukocytes, then cloning of the cDNA into pVI.1392 baculovirus vector, and expression in Sf9 cells in the presence of reduced glutathione and dithiothreitol.

Sequence 99 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MCP-1 exhibits optimal chemotactic activity at a concn. of lnM and has a mol. mass of c.a. 8,400 D. MCP-1 can be used for treating infection eg inflammatory disease, or for the control of neoplasms by accumulation of monocytes at the site of the infection. The corresp. DNA is obtd. by chemical synthesis, by screening reverse trascripts of mRNA from purified blood leukocytes or cell cultures of eg U-373 MG or KMG-5. Sequence 99 AA;
                                      Gramm
                                                                                                                                                                                                                                                                                                                                                                                                                                      28-JAN-1993 (first entry)
Sequence of P6 precursor p
Monocyte chemoattractant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chemoattractant protein MCP-1.
MCP-1; chemoattractant; heparanase; heparin; heparanarthritis; restenosis; cancer; wound healing.
                                                                                                                                                                                                                                                                                                 peptide
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28-JAN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R26581 standard;
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n W, Lins E;
92-293438/36
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                                      SCHAPER & BRUEMMER GMBH & CO
, Lins E;
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No. 6.67e-02;
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No. 6.67e-02;
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Matches 10; Conservative
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R28663 standard;
R28663;
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Poly(A+)RNA from bull seminal vesicles was used to prepare a cDNA ir the expression vector lambda gtll. 1.5 x 10(5) cDNA clones were screened with a polyclonal anti-P6 antiserum of monospecific immunoglobulin G and six positives were identified. The insert of suitable cDNA clone, pH42, was cloned into pUCl8 and sequenced.

pH42 encodes the 11,114 Da precursor of P6. It is called Monocyte Chemoattractant (bMCP-1), which is a homologue of human (h)MCP-1. There is 72% overall AA sequence homology to hMCP-1 with the signal peptide showing 100% and the central region showing 89% homology. Sequence 99 AA;
Human monocyte chemoattractant factor hMCP-1.

Human monocyte chemoattractant factor; hMCP-1; chemokine; vaccine; meningitis related homologous antigenic sequence; MRHAS; RV-1; immunoassay; diagnosis; treatment; prophylactic; bacterial;
                                                                                                                                                                                                                                        E.coli strains
Disclosure; Page 43-44; 55pp; English.
An expression plasmid, pHMC076 for producing MCF(76) consisting of 76 amino acids was constructed. DNA encoding MCF(76) was prepd. using a recombinant plasmid pHMCF7.

Sequence 99 AA;
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Drug containing a bovine protein
                                                     IT 21
R73914 standard; protein;
R73914;
05-DEC-1995 (first entry)
                                                                                                                                                                                                                                                                                                                                                              12-NOY-1992.
27-APR-1992; J00550.
09-MAY-1991; JP-135950.
(DAIN ) DAINIPPON PHARM CO LTD.
FUKUI T, Matsuo N, Yamada M, Yamagishi J;
WPI; 92-398864/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MCF.
                                                                                                                                                                                                                                                                                                                    Prodn. of polypeptide(s) having monocyte chemotactic using expression plasmids with E. coll elements and :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein
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                                                                                                                                                  75 cadpkqkwvq
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24..99
/label= mat_protein
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d. No. 6.67e-02;
Mismatches 0;
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thrombosis,
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No.
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R WPI: 95-147431/19.

R New peptide(s) and corresp. antibodies for the treatment of meningitis — the peptide(s) corresp. to homologous antigenic remeningitis — the peptide(s) corresp. to homologous antigenic remeningitis — sites on bacterial and viral agents and on chemokine(s), used for detecting and preventing meningitis

Claim 47: Fig 8/10: 98pp: English.

CR 73914 is the chemokine Human monocyte chemoattractant factor hMCP-1.

If contains the meningitis related antigenic sequences (MRHAS) claimed in R73914 is the meningitis related antigenic sequences (MRHAS) claimed in R7395 and R73907, which are recognised by a monoclonal antibody from the hybridoma Rubella virus (RV)-1. The claimed MRHAS peptides may be used in immunoassays to diagnose the presence of bacterial and/or viral meningitis agents in a sample, or in prophylactic and therapeutic meningitis treatments. The peptidess may also be used as vaccines against meningitis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Polypeptide encoding chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Adams M, Alderson R, Applebaum E, Li H, Li Y, Lima
Parmelee D, White J;
WPI; 97-435153/40.
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23-FEB-1996; WO-U02598.
(HUMA-) HUMAN GENOME SCI INC.
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(VALS/) VAN ALSTYNE D.
Sharma LR, Van Alstyne
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28-SEP-1993; US-127499
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           asthma and fibrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein 4 - useful to treat
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tumours, autoimmune disease, infection,
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Human;
solid t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bac 3 chemokine beta10 or monocyte chemotactic protein 4 variant. Human; chemokine beta10; Ck beta10; treatment; antagonist; solid tumour; infection; autoimmune disease; astima; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       syndrome, lung inflammation and atherosclerosis. Ck beta10 cDNA can be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
                                 W22672 standard; Protein; W22672; U5-MAR-1998 (first entry) Bac 2 chemokine betall or i
                                                                                                                                                                                                                                                                                                                                                                                                               diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoissis and generates antibodies. Labelled Ck betail can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or inferious compounds.
                                                                                                                                                                                                                                                                                                            be used to isolate genes encoding similar and for chromosome identification. Sequence 75 AA;
                                                                                                                                                                                                                                                                                                                                                             infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck beta10 cDNA can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Polypeptide encoding chemokine beta 4 and monocyte chemotactic
protein 4 - useful to treat tumours, autoimmune disease, infection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (HUMA-) HUMAN GENOME SCI INC.
Adams M, Alderson R, Applebau
Parmelee D, White J;
WPI; 97-435153/40.
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23-FEB-1996; WO-U02598.
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1 CADPKQKWVQ 10
chemokine betal0 or monocyte chemotactic protein 4 variant. chemokine beta10; Ck beta10; treatment; antagonist; tumour; Infection; autolumnune disease; asthma; antibody;
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Pred. No. 1.78e-01;
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23-FEB-1996; U02598.
23-FEB-1996; WO-U02598.
(HUMA-) HUMAN GENOME SCI INC.
Adams M, Alderson R, Applebaum E
Parmelee D, White J;
WPI; 97-435153/40.
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19-MAR-1998 (first entry)
Droll/2 chemokine betal0 or monocyte chemotactic protein 4 variant.
Human; chemokine betal0; Ck betal0; treatment; antagonist;
solid tumour; infection; autoimmune disease; asthma; antibody;
fibrotic disease; psoriasis; neurodegenerative disease;
wound healing; haematopolesis regulation; gene therapy;
chromosome identification; monocyte chemotactic protein 4;
Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Drol1/2 variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10. Ck
                                                                                                                                                           Polypeptide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infectasthma and fibrosis
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WO9731098-A1.
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23-FEB-1996; WO-U02598.
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Pred. No. 1.78e-01;
1; Mismatches 0;
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                                                                                                                                                                                                                                                              Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Bac 1 variant, which can be used to treat pattents deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10 Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and boused to infectious diseases, allergies, prostaglandin dependent fever and syndrome, lung inflammation and atherosis. Ck beta10 cDNA can be used to the receptor can be used to the control of 
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Bac I chemokine beta10 or monocyte chemotactic protein 4 variant.
Bac I chemokine beta10 or monocyte chemotactic protein 4 variant.
Human; chemokine beta10; Ck beta10; treatment; antagonist;
solid tumour; infection; autoimmune disease; asthma; antibody;
fibrotic disease; psoriasis; neurodegenerative disease;
wound healing; haematopoiesis regulation; gene therapy;
chromosome identification; monocyte chemotactic protein 4;
leukaemia; MCP-4; Bac 1 variant.
                                                                                                                                                               be used to isolate and for chromosome sequence 82 AA;
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Adams M. Alderson R. Applebaum
Parmelee D. White J;
WPI: 97-435153/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Polypeptide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infect
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23-FEB-1996; WO-U02598
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WO9731098-A1.
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1 CADPKQKWVQ
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larity 90.0%;
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larity 90.0%;
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                                       (ICOS-) ICO
Godiska R,
WPI; 97-489
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W30191 standard; Protein; 98
W30191;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Monocyte chemotactic protein 5.
MONOCYte chemotactic protein 5; MCP-5; human; macrophage; chemokine; inhibitor; antiinflammatory; atherosclerosis; Crohm's disease; arthritis; anglogenesis; tumour; metastasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stem cell mobilising chemokine CKbeta-10.

Haematopoietic cell; parasitic infection; colony stimulating factor; haematoregulator; immune response; bacterial infection; transplant; wound healing; bone marrow; immunosuppression; regeneration; neoplastic disease; viral disease; gene therapy; cytotoxic drug.
                                                                                                    02-OCT-1997.
26-MAR-1997; U04898.
27-MAR-1996; US-622851.
(ICOS-) ICOS CORP.
                                                                                                                                                                                                                                                                                                                                                       Protein
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24-OCT-1995; US-006051
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                                       ika R, Gray PW;
97-489645/45.
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"(Claim 4)"
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J. 1.78e-01;
J. Thes 0; Indels
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23-AUG-1994;
23-AUG-1994;
                                                                 New Chemokine Ck(beta)-4 and -10 genes and polypeptide(s) - useful to treat, e.g. leukaemia, solid tumours and auto-immune diseases Claim 19; Fig 2; 53pp; English.

A novel human chemokine, Ck beta-10 (R93087), was identified as the product of a cDNA clone (T17050) isolated from a 9-wk early human tissue cDNA library. The protein is structurally related to the chemokine family. Recombinant Ck beta-10 can be obto. by incorporating the cDNA into a vector and expression of the protein in e.g. E. coli, COS or Sf9 cells. Ck beta-10 can be used to treat solid tumours, chronic infections, psoriasis, asthma and allergy, to regulate haematopoiesis, promote wound healing, and to inhibit analysis construction of the protein in e.g. E. coli, COS or Sf9 cells. Ck beta-10 can be used to treat solid tumours, chronic infections, psoriasis, asthma and allergy, to regulate haematopoiesis, promote wound healing, and to inhibit analysis characteristic parts.
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R93087 standard; Protein; 9
R93087;
R93087;
27-AUG-1996 (first entry)
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This polypeptide comprises human macrophage-derived monocyte chemotactic protein-5 (MCP-5), a novel C-C chem Its amino acid sequence was deduced from a cDNA clone (s T90880 and T90883) isolated from a human macrophage cDNA
                                    angiogenesis. It can colony formn. during
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llarity 90.0%;
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                                        chemotherapy.
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Pred. No. 1.78e-01;
1; Mismatches 0;
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Human chemokine beta10 or monocyte chemotactic protein 4.
Human; chemokine beta10; Ck beta10; treatment; antagonist;
solid tumour; infection; autoimmune disease; asthma; antibody;
fibrotic disease; psoriasis; neurodegenerative disease;
wound healing; haematopoiesis regulation; gene therapy;
chromosome identification; monocyte chemotactic protein 4;
leukaemia; MCP-4.
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28-AUG-1997.
23-FEB-1996; U02598.
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N-PSDB; T85029.
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SUMMARIES

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PID:g386961
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A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-1/monocyte chemotactic
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The human homolog of the JE gene encodes a monocyte secretory
                                                                                                                                                                                                                                                                                                         Yoshimura, T.; Leonard, E.J.
Adv. Exp. Med. Biol. (1991) 305:47-56
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                                                                     Int. J. Cancer (1990) 45:795-797
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protein-tyrosine kina
beta-galactosidase (E
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                                                                                                               A.; Nobili, N.; Mantovani,
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#map_position 17q11.2-17q12
CLASSIFICATION #superfamily macrophage inflamm
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#journal Mol. Cell. Biochem. (1993) 126:61-68

#title The expression of monocyte chemotactic protein (MCP-1) in

human vascular endothelium in vitro and in vivo.

#cross-references MUID:94150478

#accession I57488
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##molecule_type protein
##molecule_type 29-33,'XX',36-52;82-92 ##label DEC
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#title Identification of the monocyte chemotactic protein
osteosarcoma cells and monocytes: detection of a
N-terminally processed form.
#cross-references MUID:90211336
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Yamada, M.; Larsen, C.G.; Oppenheim, J.J.; Matsushima, K.
#journal Biochem. Biophys. Res. Commun. (1989) 159:249-255
Cloning and sequencing of the cDNA for human monocyte
*title chemotactic and activating factor (MCAF).
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##residues 24-28,'Q',30-99 ##label YEQ
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#*residues 1-99 ##label LIY
##cross-references GB:S69738; NID:g545464; PID:g545465
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##cross-references GB:M24545; NID:g187434; PID:g307163
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##residues 'X',25-99 ##label ROB
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                                                                                                                                                                                                                                                                                                                                                                                                               Ye, O.N.; Su, G.F.; Yuan, Y.; Huang, C.F.
Chinese J. Microbiol. Immunol. (1994) 14:29-32
The PCR, cloning and sequencing of human monocyte
chemoattractant protein-1 (MCP-1) gene.
                                                                                                                                                                                                 cytokine; glycoprotein; inflammation;
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#domain signal sequence #status predicted 
#product monocyte chemoattractant protein 
experimental #label MAT\
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##residues 1-99 ##label WEM
##cross-references GB:M84602; GB:M85264; NID:g163394; PID:g163395
ccession B39296
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##residues 50-68,'X',70-74,'X',76 ##label WE2

##experimental_source seminal vesicle

##experimental_source seminal vesicle
                                             ##molecule_type protein
##residues 1-99 ##
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Local Similarity 100.0%;
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10; Conservative
MCP-1
26/1;
                                                                                                 Wempe, F.; Kuhlmann, J.K.; Scheit, K.H.
Biochem. Biophys. Res. Commun. (1994) 202:1272-1279
Characterization of the bovine monocyte chemoattractant
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monocyte chemoattractant protein 1 precursor - bovine
monocyte chemotactic factor 1; seminal plasma protein P6
#formal_name Bos primigenius taurus #common_name cattle
03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change
                                                                            JC2336
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monocyte chemoattractant protein-1 - bovine
#formal_name Bos primigenius indicus #common_name zebu cattle
20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
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                   ##residues 1-99 ##label ZAC
##cross-references EMBL:X79416; NIC
##CFICATION ##Superfamily macrophage
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##cross-references GB:M57440; NID:g165469; PID:g165470
##cross-references GB:M57440; NID:g165469; PID:g165470
##superfamily macrophage inflammatory protein
RY #length 125 #molecular-weight 13776 #checksum
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Similarity 100.0%;
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monocyte chemoattractant protein-1 precursor - pig
#formal_name Sus scrofa domestica #common_name domestic
30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change
08-Sep-1997
                                                                                                                   Zach, O. submitted to the EMBL Data S57498
glycoprotein
                                                                                                                                                                                        S57497
                                                                                                                                                                                                                                                    JC2136
                                                                                                                                                                                                                                                                       Biochem. Biophys. Res. Commun. (1994) 199:962-968
Porcine luteal cells express monocyte chemoattractant
protein-1 (MCP-1): Analysis by polymerase chain reaction
and cDNA cloning.
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J. Immunol. (1991) 146:3483-3488
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monocyte chemoattractant protein-1 - rabbit
#formal_name Oryctolagus cuniculus #common_name domestic
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#length 99 #molecular-weight 11114 #checksum
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Pred. No. 8.66e-06;
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Pred. No. 8.66e-06;
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                                                                                                                                                                                                                                                                                                                                                                      I.; Klaudiny, J.; Wempe, F.; Wuttke,
                   NID:g872312; PII
age inflammatory
                                                                                                                                           Library, July 1994
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                                      PID:g872313
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Best Local Similarity 90.0%;
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                                                                                                                      ##cross-references EMBL:X77603; NID:g602551; PID:g602552
WT This protein is identified as a potent eosinophil chemoattractant.
IFICATION #superfamily macrophage inflammatory protein
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##cross-references EMBL:U18941; NID:g687655; pID:g687656
#FICATION #superfamily macrophage inflammatory protein
#length 96 #molecular-weight 10753 #checksum 7236
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Local Similarity 90.0%;
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JC2478
                                                                                                                                                                                                                                                Jose, P.J.; Adcock, I.M.; Griffiths-Johnson, D.A.; Berkman, N.; Wells, T.N.C.; Williams, T.J.; Power, C.A.
Biochem. Biophys. Res. Commun. (1994) 205:788-794
Eotaxin: Cloning of an eosinophil chemoattractant cytokine and increased mRNA expression in allergen-challenged
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Leder, P.
J. Exp. Med. (1995) 181:1211-1216
Constitutive and allergen-induced expression
                                                                                                         glycoprotein
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#formal_name Rattus norvegicus
21-Feb-1995 #sequence_revision
08-Sep-1997
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#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
09-May-1997
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#binding_site carbohydrate (Asn) (covalent) #status predicted
                                 #domain signal sequence #status predicted #label SIG\
#product eotaxin #status predicted #label MAT\
#binding_site carbohydrate (Thr) (covalent) #status
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#checksum 7329
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##experimental_source corpus luteum
#FICATION #superfamily macrophage inflammatory protein
                  ##residues
                  ##molecule_type mRNA ##residues 1-109 ##label OP2
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Similarity 90.0%;
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                                                                                                                                                                                                                                                               Opdenakker, G.; Fiten, P.; Nys, G.; Froyen, Speleman, F.; Laureys, G.; Van Damme, J. Genomics (1994) 21:403-408
The human MCP-3 gene (SCYA7): cloning, seque assignment to the C-C chemokine gene clust
                                                                Biochem. Biophys. Res. Commun. (1993) 191:535-542
Human monocyte chemotactic protein-3 (MCP-3): Molecular
cloning of the cDNA and comparison with other chemokines
                                                                                                                                       Opdenakker, G.; Froyen, G.; Fiten, P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Schelt, K.H.

Schelt, K.H.

Biochem. Biophys. Res. Commun. (1994) 205:148-153

Biochem luteal cells express monocyte chemoattractant protein-2 (MCP-2): Analysis by cDNA cloning and northern
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monocyte chemoattractant protein-2 - pig
#formal_name Sus scrofa domestica #common_name domestic
24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change
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#product monocyte chemoattractant protein-2 #status
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90.0%;
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Pred. No. 2.60e-04;
0; Mismatches 1
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Pred. No. 2.60e-04;
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#map_position 17q11-17q12
#introns 36/1; 75/2
ASSIFICATION #superfamily macrophage inflammatory protein YWORDS cytokine; glycoprotein; inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                #journal J. Immunol. (1993) 150:5025-5032
#title cDNA cloning of guinea pig monocyte chemoattractant protein-1
and expression of the recombinant protein.
#cross-references_MUID:93267104
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##cross-references EMBL:X71087; NID:g288396; PID:g288397
This protein induces proteinase secretion and chemo
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Molecular cloning of MCP-3: a human monocyte-derived monocyte chemoattractant protein.
eotaxin - human
#formal_name Homo sapiens #common_name man
01-Nov-1996 #sequence_revision 01-Nov-1996 #text_change
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#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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Pred. No. 2.60e-04;
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Pred. No. 2.60e-04;
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#accession I52322
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##residue
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IFICATION #superfamily macrophage inflammatory protein
#length 92 #molecular-weight 10335 #checksu
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##residues 1-92 ##label RES
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IT This protein has eosinophil specific chemotatic activity
ITICATION #superfamily macrophage inflammatory protein
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Local Similarity 80.0%;
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Local Similarity 80.0%;
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Ishikawa, J.;
Suzuki, K.
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JC4912
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#formal_name Canis lupus familiaris #common_name dog
19-May-1994 #sequence_revision 19-May-1994 #text_change
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Biochem. Biophys. Res. Commun. (1995) 211:289-295
Molecular cloning and posttranscriptional regulation of
macrophage inflammatory protein-1 alpha in alveolar
macrophages.
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macrophage inflammatory protein-lalpha - rat
#formal_name Rattus norvegicus #common_name Norway rat
29-May-1998 #sequence_revision 29-May-1998 #text_change
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Biochem, Biophys. Res. Commun. (1996) 225:1045-1051
Human dermal fibroblasts express ectaxin: Molecular cloning mRNA expression, and identification of ectaxin sequence
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1; Mismatches 1:
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HSuan, J.; Waterfield, M.D.; Williams, T.J.
#journal Biochem. J. (1990) 271:797-801

#title A novel neutrophil chemoattractant generated during an inflammatory reaction in the rabbit peritoneal cavit vivo. Purification, partial amino acid sequence and structural relationship to interleukin 8.

#cross-references_MUID:91058518
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#title
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J. Immunol. (1991) 146:3483-3488

#title Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and their expression in spleen cells.

#cross-references_MUID:91225489
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##residues 23-33,'X',35,'X',37-46,'X',48-49,'I',51-53 ##label
FICATION #superfamily beta-thromboglobulin
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##cross-references GB:M57439; NID:gl65552; PID:gl65553
NCE S13052
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This protein is a polymorphonuclear leukocyles and is involved in the host defense function
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interleukin-8 - rabbit
neutrophil attractant/activation protein-1
#formal_name Oryctolagus cuniculus #common_name domestic
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Cloning of a canine gene homol
interleukin-8-encoding gene.
interleukin-8 - sheep
#formal_name Ovis sp. #common_name sheep
21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change
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#length 95 #molecular-weight 10611 #checksum
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                                       I46997 #type complete interleukin-8 - sheep
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Pred. No. 1.73e-03;
1; Mismatches 1
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#superfamily beta-thromboglobulin
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Similarity 80.0%;
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Nucleotide sequence of ovine interleukin 8 cDNA using
polymerase chain reaction.
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06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
08-Sep-1997
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#superfamily beta-thromboglobulin
#length 101 #molecular-weight 11292
               Goodman, R.B.; Foster, D.C.; Mathewes, S.L.; Osborn, S.G
Kuljper, J.L.; Forstrom, J.W.; Martin, T.R.
Biochemistry (1992) 31:10483-10490
Molecular cloning of porcine alveolar macrophage-derived
neutrophil chemotactic factors I and II; identification
                                                                                                                                            alveolar macrophage chemotactic factor-I (AMCF-I)
interleukin-8 homolog - pig
#formal_name Sus scrofa domestica #common_name domestic pig
30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change
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interleukin 8 - sheep
formal_name Ovis orientalis aries, Ovis ammon aries
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Cordier, G.
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porcine IL-8 and another intercrine-alpha protein.
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##residues 1-99 ##label VAN
##cross-references GB:Y10802; NID:g1924937; PID:e294088; PID:g1924938
##experimental_source bone marrow
This protein belongs to the beta-chemokine family which is one of
the major HIV-suppressive factors. It plays roles in autoimmune
processes such as multiple sclerosis and rheumatoid arthritis and
in tumor biology, and contribute to the trafficking and
recuitment of the responsive cells.
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##cross references GB:M86923; NID:g164520; PID:g164521
IFICATION #superfamily beta-thromboglobulin
#length 103 #molecular-weight 11633 #chec
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P.; Van Aelst, I.; Van Damme, J.; Opdenakker, G.
Biochem. Biophys. Res. Commun. (1997) 231:726-730
Human monocyte chemotactic protein-2: cDNA cloning and
regulated expression of mRNA in mesenchymal cells.
                                                                                                                                                                                                                                                                                                                                        JC5295 #type complete
monocyte chemotactic protein-2 - human
#formal_name Homo sapiens #common_name man
02-May-1997 #sequence_revision 18-Jul-1997
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J. Biol. Chem. (1994) 269:77-85
Regulation of interleukin-8 expression in porcine macrophages by bacterial lipopolysaccharide.
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#formal_name Sus scrofa domestica #common_name domestic pig
02-Jun-1995 #sequence_revision 02-Jun-1995 #text_change
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                                                                                                                         ERENCE A30209
Fauthors Rollins, B.J.; Morrison, E.D.; Stiles, C.D.
Fauthors Rollins, B.J.; Morrison, E.D.; Stiles, C.D.
Fucc. Natl. Acad. Sci. U.S.A. (1988) 85:3738-3742
Flatchet-derived growth factor and whose product
Cytokine-like properties.
Fuccoss-references MUID:88234501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #authors Yoshimura, T.; Johnson, D.G.
#journal J. Immunol. (1993) 151:6225-6236
#title cDNA cloning and expression of guinea
attractant protein-1 (NAP-1): NAP-1
guinea pig.
#cross-references MUJD:94065176
#accession 148148
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24-99
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                                                              ##residues 1-148 ##label
##cross-references GB:M19681;
                                                                                         ##molecule_type DNA
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Kawahara, R.S.; Deuel, T.F.
J. Biol. Chem. (1989) 264:679-682
Platelet-derived growth factor-inducible
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A30209; A44771; A30861
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#length 101 #molecular-weight 11
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Neutrophil attractant protein-1 - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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#superfamily macrophage inflammatory protein
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Pred. No. 6.96e-03
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Pred. No. 4.39e-03;
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                                                              #journal #title
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#title Molecular cloning of TPAR1, a gene whose expression is repressed by the tumor promoter 12-0-tetradecanoylphorbol 13-acetate (TPA).
#cross-references MUID:95073497
#accession 153416
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##cross-references GB:J04467;
##molecule_type mRNA
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Interleukin-8 homolog - mouse
#formal_name Mus sp. #common_name mouse
02-Aug-1996 #sequence_revision 02-Aug-1996
28-Feb-1997
                                                                                                                               A53497 #type complete
pre-B-cell growth-stimulating factor precursor - mouse
#formal_name Mus musculus #common_name house mouse
02-Jun-1994 #sequence_revision 02-Jun-1994 #text_change
10-Sep-1997
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26/1; 65/2
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                                Nagasawa, T.; Kikutani, H.; Kishimoto, T.
Proc. Natl. Acad. Sci. U.S.A. (1994) 91:2305-2309
Molecular cloning and structure of a pre-B-cell
growth-stimulating factor.
A53497
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llarity 70.0%;
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:es GB:S74318; NID:g786393; PID:g786394
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Pred. No. 1.10e-02
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#title Signal sequence trap: a cloning strategy
proteins and type I membrane proteins.
#cross-references MUID:93342488
#accession I59582
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#title
                                                             #accession
                                                                        #title Signal sequence trap: a cloning strategy proteins and type I membrane proteins. #cross-references_MUID:93342488
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            ##tatus preliminary; trai
##molecule_type mRNA
##residues 1-93 ##label RES
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##residues
##residues
##cross-references EMBE:U16752; NID:g1272194; PID:g571508
##cross-references EMBE:U16752; NID:g1272194; PID:g571508
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##residues 1-89 ##label F
##cross-references GB:L12029;
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 ##cross-references GB:L12030;
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Local Similarity 70.0%;
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Similarity 70.0%;
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cytokine
#length 89 #molecular-weight 10032 #checksum
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cytokine SpF-1-beta - human
#formal_name Homo sapiens #common_name man
21-Dec-1996 #sequence_revision 06-Jun-1997
                                                                                                                      Honjo, T.
Science (1993) 261:600-603
                                                                                                                                                                      181182
159582
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#formal_name Mus musculus #common_name house mouse

02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change

28-Feb-1997
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Pred. No. 2.73e-02;
1; Mismatches 2
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Pred. No. 2.73e-02;
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##residues 1-99 ##label KOW
##cross-references GB:M26383; NII
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##cross-references GB:M28130; NID:g186367; PID:g186368
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##note nucleotides of the second exon
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beta-thromboglobulln-like protein; fibroblast-derived
neutrophil-activating factor alpha; lung carcinoma-derived
chemotaxin; lymphocyte-derived neutrophil-activating
factor; monocyte-derived neutrophil chemotactic factor;
monocyte-derived neutrophil-activating factor
#formal_name Homo sapiens #common_name man
08-Dec-1992 #sequence_revision 08-Dec-1992 #text_change
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#length 93
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Mol. Cell. Biol. (1989) 9:1946-1957
Regulation of the mRNA for monocyte-derived
neutrophil-activating peptide in differentiating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Molecular cloning of a human monocyte-derived neutrophil chemotactic factor (MDNCF) and the induction of MDNCF by interleukin 1 and tumor necrosis factor.
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J. Exp. Med. (1988) 167:1883-1893
                                                                               King, C.H.; Gordon, G.S.; Konieczkowski, M.; Sedor, J.R. submitted to the EMBL Data Library, February 1992
                                                                                                                                         S37634
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J. Immunol. (1989) 143:1366-1371
Genomic structure of the human monocyte-derived neutrophil chemotactic factor II-8.
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37034; JL0041; A32791; S37634; PL0107; A28598; A27488;
A39960; A60401; A60591; S15827; S04216; A60567; A60847;
S15417; S03975; I54560; I55992; I37902; S67519
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#title
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #authors Yoshimura, T.; Matsushima, K.; Tanaka, S.; Robinson, E.A.;
Appella, E.; Oppenheim, J.J.; Leonard, E.J.
#journal Proc. Natl. Acad. Sci. U.S.A. (1987) 84.9233-9237
#title Purification of a human monocyte-derived neutrophil chemotactic factor that has peptide sequence similarity other host defense cytokines.
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#journal J. Exp. Med. (1989) 169:1895-1901

#title Purification and partial primary sequence of a chemotactic protein for polymorphonuclear leukocytes derived from human lung giant cell carcinoma LU65C cells.

#cross-references MUID:89279141
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##residues 28-69 ##label YOS
                                                                                                                 ##molecule_type protein
##residues 23-33,'X',35,'X',37-42 ##label VAN
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##residues 23-32 ##label SCH
##experimental_source dermal fibroblasts
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##residues 28-59 ##label WAL
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##residues 28-99 ##label GRE
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##residues 23-32,'XR',35,'X',37-52,'L',54 ##label
##experimental_source lung giant cell carcinoma LU65C
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Opdenakker, G.; Billiau, A.
Eur. J. Immunol. (1989) 19:1189-1194
The chemotactic activity for granulocytes produced by virally infected fibroblasts is identical to monocyte-derived
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J. Immunol. (1990) 144:2223-2232
II-lalpha or tumor necrosis factor-alpha stimulate release of three NAP-1/IL-8-related neutrophil chemotactic proteins in human dermal fibroblasts.
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Structure determination of a human lymphocyte derived neutrophil activating peptide (LYNAP).
Nakagawa, H.; Hatakeyama, S.; Ikesue, A.; Miyai, FEBS Lett. (1991) 282:412-414
Generation of interleukin-8 by plasmin from
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AVLPR-interleukin-8, the human fibroblast-derived

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#title Purification of granulocyte chemotactic peptide/interleukin-8
reversiand sequence heterogeneity similar to that
of beta-thromboglobulin.
#cross-references_MUID:89231715
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##residues 21-33,'X',35,'X',37-47 ##label YO2
##residues the forms starting from positions 21, 23, and
##note represented 8%, 47%, and 45%, respectively,
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##residues 28-47 ##label VA3
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##residues 21-67 ##label VA2
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of annotations omitted.
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A novel, NH-2-terminal sequence-characterized human monokine possessing neutrophil chemotactic, skin-reactive, and granulocytosis-promoting activity.
                                                          K.; Mizumo, S.; Suzuki, K.
Immunol. Lett. (1990) 24:165-170
Coding region structure of interleukin-8 gene of human lung
giant cell carcinoma LU65C cells that produce
LUCT/interliukin-8: homogeneity in interleuki-8 genes.
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Biochem. J. (1989) 259:585-588
Inflammatory cytokines induce synthesis and secretion
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Biochem. J. (1991) 275:581-584
Formation of neutrophil-activating peptide 2 from
platelet-derived connective-tissue-activating peptide III
by different tissue proteinases.
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#title Isolation and characterization of cDNA from renal tubular epithelium encoding murine Rantes: A small intercrine from the Scy superfamily.

#cross-references MUID:92277990
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\text{Mol. Cell. Biol. (1994) 14:2914-2925} \\
\text{#title Definition of a lipopolysaccharide-responsive} \\
\text{5'-flanking regions of MuRantes and crg-2.} \\
\text{#cross-references MUID:94217689} \end{arrange}
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Schall, T.J.; Simpson, N.J.; Mak, Schall, T.J.; Simpson, N.J.; Mak, Schall, T.J.; Immunol. (1992) 22:1477-1/
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                                                       #superfamily macrophage inflammatory protein chemotaxis; cytokine; immediate-early protein;
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#title cDNA sequence of two inducible T-cell genes.
#accession A32393
##molecular A32393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #cross-references MUID:88258380
#accession S04533
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#accession S11685
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##cross-references EMBL:X12531
##note the authors translated the codon GAG for residue 49 as
##note Asp and ATT for residue 91 as Asn
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1-92 ##label KWO
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Davatelis, G.; Tekamp-Olson, P.; W
Luedke, C.; Gallegos, C.; Coit,
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macrophage inflammatory protein-1-alpha precursor - mouse
heparin-binding chemotaxis protein; L2G25B protein;
SCI/MIP-la; SIS alpha; stem cell inhibitor/macrophage
inflammatory protein 1-alpha; T-cell activation protein
alpha, mys
                                                                                                                                                                                           J. Exp. Med. (1989) 170:2189
erratum
A53885
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Cloning and characterization of a cDNA for murine macrophage inflammatory protein (MIP), a novel monokine with inflammatory and chemokinetic properties.
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Sequence of the murine haemopoletic stem cell inhibitor/macrophage inflammatory protein 1-alpha gene.
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17-Jul-1992 #sequence_revision 17-Jul-1992 #text_c
08-Sep-1997
Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski,
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, D.; Merryweather, J.;
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#accession I56104
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#journal J. Exp. Med. (1988) 167:570-581

#title Inflammatory and neutrophil chemokinetic properties.

#cross-references_MUID:88154745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #title Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta.

#cross-references_MUID:89067830
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##cross-references GB:M73061; NID:g199694;
This protein is a monokine.
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##residues 24-33,'XX',36-42 ##label WOL
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A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors and indicators of various activation processes.
C60407 #type fragment monocyte adherence-induced protein 5 beta - human (fragment) #formal_name Homo sapiens #common_name man 06-Nov-1992 #sequence_revision 06-Nov-1992 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sherry, B.; Cerami, A.
J. Immunol. (1991) 146:4031-4040
Genomic structure of murine macrophage inflammatory
protein-1-alpha and conservation of potential regulatory
sequences with a human homolog, LD78.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Widmer, U.; Yang, Z.; van Deventer, Sherry, B.; Cerami, A.
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#product macrophage inflammatory protein #status
experimental #label MAT
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                                                                                                                                                                                                                                                                                                        #authors Napolitano, M.; Modi, W.S.; Cevario, S.J.; Gnarra, J.R.;
Seuanez, H.N.; Leonard, W.J.
#journal J. Biol. Chem. (1991) 266:17531-17536.

#title The gene encoding the Act-2 cytokine. Genomic structure,
HTLV-I/tax responsiveness of 5' upstream sequences, and
chromosomal localization.
#cross-references_MUID:91373378
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#accession C60407
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#accession A31767
                                                                                                                                                     #authors
                                                                                                                                                                                                                                                                                        #accession
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #authors
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                                                                                                                                                                                                                                          ##residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ##residues 1-92 ##label BAI ##cross-references GB:X53682; NID:g34217; PID:g34218 ##experimental_source natural killer cell, strain CD:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ##residues
                                                                                                                                                                                                                     ##residues 1-14,'S',16-69,'G',71-92 ##label NAP ##cross-references GB:M69201; NID:g178021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ##molecule_type mRNA
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##molecule_type mRNA
                                                                                                                                                                                              ##note
                                                                                                                                                                                                                                                            ##molecule_type DNA
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Local Similarity 70.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    macrophage inflammatory protein 1-beta precursor - human cytokine HC21; G-26 protein; H400 homolog; lymphocyte activation gene 1 protein (LAG-1); MIP-lbeta; pART/44; SC protein (misidentification); SIS gamma homolog; T-cell activation protein 2 (Act-2); T-cell activation protein
                                                                                                                                                                                                                                                                                     A40978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #superfamily macrophage inflammatory protein
#length 50 #checksum 9927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Martin, G.; Ladner, M.; Haskill, S.
J. Immunol. (1990) 144:4434-4441
Monocyte adherence results in selective induction of nov genes sharing homology with mediators of inflammation tissue repair.
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A60407
                                                                Proc. Natl. Acad. Sci. U.S.A. (1988) 85:9704-9708 Identification, cloning, and characterization of an immune activation gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JH0319
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Cloning and expression of a lymphocyte activation gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #formal_name Homo sapiens #common_name man
07-Jun-1990 #sequence_revision 29-May-1998 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sporn,
                                                                                                                                                   Lipes, M.A.; Napolitano, M.; Jeang,
                                                                                                                                                                              A31767
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Mechiche, S.; Viegas-Pequignot, E.; Hercend, T.; Triebel,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-May-1998
                                                                                                                                Leonard, W.J.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              translation not shown
                                                                                                                                                                                                15-Ala was also found
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #type complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      strain CD3-CD2+, F5,
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                                                                                                                                                   K.T.; Chang, N.T.;
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FEATURE
1-23
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**cross-references GB:J04130; NID:g178017; PID:g178018
REFERENCE A37411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUMMARY
                                                                                                                                                                                                                                                       CLASSIFICATION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                GENETICS
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Query Match 76.2%;
Best Local Similarity 70.0%;
Matches 7; Conservative
                                                                                                                                                                             24-92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      **TERENCE A30552
**Fauthors Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.

**Journal J. Immunol. (1989) 142:679-687

**Title A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.

**Ecross-references MUID:89093958**
                                                                                                                                                                                                                                                                                                    ##cross-references GDB:127451;
#map_position 17q21-17q21
#introns 26/1; 64/2
                                                                                                                              34-58,35-74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #title Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of secreted factors.

#cross-references_MUID:89140347
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#accession A37411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #contents
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#cross-references MUID:90038522
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ##residues 1-19,'L',21-92 ##label ZIP ##cross-references GB:M25316; NID:g602454; PID:g602455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ##residues 1-39,'REASS',46-92 ##label BRO ##coss-references GB:M23502; NID:g533212; PID:g533213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ##molecule_type mRNA
##residues 1-39
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                                                                                                                                                                                                                                                                                                                                                                                                                               ts annotation; conformation and disulfide bond assignments by (1)H-MMR, residues 24-92
This protein is secreted by activated lymphocytes and monocytes.
is bound by chemokine (C-C) receptor 5 (see PIR:A43113) and receptor 1 (see PIR:A45177).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Clore, G.M.; Lodi, P.J.; Garrett, D.S.; Gronenborn, A.M. submitted to the Brookhaven Protein Data Bank, January 1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, J. Immunol. (1989) 143:2907-2916
A novel polypeptide secreted by activated human T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A37411
Chang, H.C.; Reinherz, E.L.
Eur. J. Immunol. (1989) 19:1045-1051
Isolation and characterization of a cDNA encoding a cyttokine which is induced by stimulation via the C structure on human T lymphocytes.
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                                                                                                 #length
                                                                                                                                                                                                                                                       #superfamily macrophage inflammatory protein
chemotaxis; cytokine; inflammation
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                                                                                            #domain signal sequence #status predicted #label SIG\
#product macrophage inflammatory protein 1-beta #status
experimental #label MAT\
#disulfide_bonds #status experimental
#disulfide_bonds #status experimental
#th 92 #molecular-weight 10212 #checksum 7597
                       Score 64; DB 1; 1
Pred. No. 1.04e-01
                                                                                                                                                                                                                                                                                                                                                              OMIM: 153335
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #label MIL
PID:g339727
                                               Length 92;
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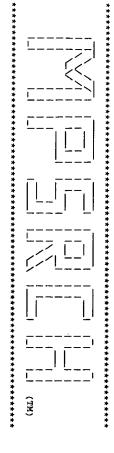
Gaps

0

Db 74 CADPSESWVQ 83
|||| : |||
Qy 1 CADPKOKWVQ 10

Search completed: Thu Apr 1 07:27:32 1999
Job time: 13 secs.

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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm Run on: Thu Apr 1 07:25:50 1999; MasPar time 2.24 Seconds

Run on: Thu Apr 1 07:25:50 1999; MasPar time 2.24 Seconds
119.693 Million cell updates/sec
Tabular output not generated.

Title: >US-08-927-939-7
Description: (1-10) from US08927939.pep
Perfect Score: 84
Sequence: 1 CADPKQKWVQ 10

Scoring table: PAM 150 Gap 15

Searched: 74019 segs, 26840295 residues

Post-processing: Minimum Match 0% Listing first 100 summaries

Database: swiss-prot36 1:swissprot

Statistics: Mean 24.646; Variance 32.043; scale 0.769

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		Þ			SUMMARIES		
Result No.	Score	Query Match	Length	DB	ID	Description	Pred. No.
! ! ! ب	84	100.0	99	-	MCP1_HUMAN	MONOCYTE CHEMOTACTIC P	5.05e-07
2	84	100.0	99	Н	MCPA_BOVIN	E CHEMOTACTIC	5.05e-07
ω	84	100.0	99	ب	MCP2_BOVIN	CHEMOTACTIC	5.05e-07
4	84	100.0	101	Ь	MCP1_CANFA	CHEMOTACTIC	5.05e-07
v	84	100.0	125	Н	MCP1_RABIT	CHEMOTACTIC	
σ	83	98.8	99	ب	MCP1_PIG	CHEMOTACTIC	8.83e-07
7	80	95.2	98	ш	MCP4_HUMAN	MONOCYTE CHEMOTACTIC P	4.64e-06
æ	77	91.7	96	Н	EOTA_CAVPO	EOTAXIN PRECURSOR (EOS	2.39e-05
و	77	91.7	97	Н	EOTA_HUMAN	EOTAXIN PRECURSOR (EOS	
10	77	91.7	97	щ	EOTA_MOUSE	_	2.39e-05
H	77	91.7	97	Н	EOTA_RAT	EOTAXIN PRECURSOR (EOS	2.39e-05
12	77	91.7	99	ш	MCP3_HUMAN	MONOCYTE CHEMOTACTIC P	
13	77	91.7	99	ш	MCP2_PIG		
14	77	91.7	120	Н	MCP1_CAVPO	MONOCYTE CHEMOTACTIC P	2.39e-05
15	73	86.9	92	دم	MI1A_RAT	MACROPHAGE INFLAMMATOR	2.03e-04
16	73	86.9	101	ب	IL8_CANFA	INTERLEUKIN-8 PRECURSO	2.03e-04
17	73	86.9	101	Н	IL8_RABIT	INTERLEUKIN-8 PRECURSO	
18	73	86.9	101	щ	IL8_SHEEP	INTERLEUKIN-8 PRECURSO	2.03e-04
19	73	86.9	103	بــ ـا	IL8_PIG	INTERLEUKIN-8 PRECURSO	2.03e-04
20	73	86.9	104	ب	MCP5_MOUSE	MONOCYTE CHEMOTACTIC P	2.03e-04
21	71	84.5	89	_	MIP4_HUMAN	MACROPHAGE INFLAMMATOR	5.81e-04
22	71	84.5	99	Ь	MCP2_HUMAN	MONOCYTE CHEMOTACTIC P	5.81e-04
23	70	83.3	101	,	IL8_BOVIN	INTERLEUKIN-8 PRECURSO	9.79e-04

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MIDE RABIT LIN_RAT MIDE RABIT LIN_RAT LIN_RAT LIN_MOUSE SISD_PIG SISD_PIG SISD_PIG SISD_PIG SISD_CAVPO ON MIDE RAT MIDE RAT MIDE RAT MIDE RAT MIDE PASCH COLL SISF MOUSE EMF1_CHICK SEX_HUMAN CLO_MOUSE EMF1_CHICK SEX_HUMAN CLO_MOUSE EMF1_CHICK SEX_HUMAN CLO_MOUSE CD37_MOUSE FCOLL SISF MOUSE FCOLL SISF MOUSE FCOLL SISF MOUSE FCOLL SISF MOUSE FCOLL LARAOL LARAOL LARAOL LARAOL LARAOL LARAOL LARAOL CHIL_BOVIN CLHIL_MOUSE FOOG CHL_BOVIN CLHIL_MOUSE FCOLL SULDROME CNJ_FLVCI SD_DROME TOS_SCHPO FES_FSUST C765_SOLMS FES_FSUST FES_FSUST FES_FELCA FESS_FELCA	ILB_CAVPO MCPL_MOUSE SDF1_MOUSE SDF1_HUMAN ILB_HUMAN SISD_MOUSE MIIA_MOUSE MIIA_HUMAN CCC1_HUMAN CCC1_HUMAN MIIB_HUMAN MIIB_HUMAN MIIB_HUMAN MIIB_HUMAN MIIB_MOUSE ILB_MACMU
HYERLEUKIN BY PKECUKSON MONOCYTE CHEMOTACTIC PRECURSOR MACROPHAGE INFLAMMATOR LYMPHOTACTIC PRECURSOR T-CELL SPECIFIC RANTES HYPOTHETICAL 13.2 KD PMACROPHAGE INFLAMMATOR BETA-GALLACTOSIDASE PROTEIN HM3.  MACROPHAGE INFLAMMATOR HYPOTHETICAL 20.8 KD PMETHYLAMINE DEHYDROGEN LEUKOCYTE ANTICEN CD37 TRANSCRIPTIONAL REPRES SMALL INDUCIBLE CYTOKI 2-HYDROXYMUCONIC SEMIA HYPOTHETICAL 54.5 KD PMETHYLAMIN E POLYNCIED FOLD SETA-GALLACTOSIDASE PRE XINESIN HEAVY CHAIN.  COENZYME POQ SYNTHESIS ENV POLYPROTEIN PRECUR RINESIS HEAVY CHAIN.  COENZYME POQ SYNTHESIS ENV POLYPROTEIN PRECUR SOR INVERTASE 2 PRECURSOR INVERTASE 4 PRECURSOR INVERTASE 5 PRECURSOR INVERTASE 7 PROTEIN PRECUR CLATHRIN HEAVY CHAIN.  CL	INTERLEUKIN-8 PRECURSO MONOCYTE CHEMOTACTIC P MONOCYTE CHEMOTACTIC P STROMAL CELL-DERIVED F STROMAL CELL-DERIVED F STROMAL CELL-DERIVED F STROMAL CELL-DERIVED F MACROPHAGE INFLAMMATOR INTERLEUKIN-8 PRECURS T-CELL SPECIFIC RANTES MACROPHAGE INFLAMMATOR T-CELL SPECIFIC RANTES CHEMOKINE CC-1 PRECURS CHEMOKINE CC-2 PRECURS MACROPHAGE INFLAMMATOR
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[4]
SEQUENCE FROM N.A.
MEDLINE; 90290466.
SHYY Y.J., LI Y.S., KOLA-
SHYY Y.J., TTOPHYS. RES. C
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                                                                   SEQUENCE OF 2.5 SEQUENCE OF 2.5 SEQUENCE OF 2.5 SEQUENCE OF 2.5 SHABANOWITZ J., HUNT D.F., APPELLA E. SHABANOWITZ J., HUNT D.F., APPELLA E. SHABANOWITZ J., ACAD. SCI. U.S.A. 86:1850
                        SEQUENCE OF 29-53 AND 8 MEDLINE; 90211336.
DECOCK B., CONINGS R., BIOCHEM. BIOPHYS. RES.
                                                                                                                                      ADV.
                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE; 94150478. LI Y.S., SHYY Y.J.
                                                                                                                                                                                                                                                            [6].
                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
MEDLINE; 91207938.
CHANG H.C., HSU E., FREEMAN G.J.,
INT. IMMUNOL. 1:388-399(1989).
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LARSEN C.G., OPPENHEIM
BIOCHEM. BIOPHYS. RES.
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FURUTANI
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01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOTACTIC AND ACTIVATING FACTOR) (MCAF) (MONOCYTE SECRETORY PROTEIN JE)
(MONOCYTE CHEMOATTRACTANT PROTEIN 1) (HC11) (SMALL INDUCIBLE CYTOKINE
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MEDLINE; 92095166.
YOSHIMURA T., LEONARD
                                                                                                                                                                                                     LI Y.S., SHYY Y.J.,
KOLATTUKUDY P.E.;
MOL. CELL. BIOCHEM.
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EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                               YOSHIMURA T., YUHKI
LEONARD E.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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   STRUCTURE
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S (HUMAN).
CHORDATA; 1
   MODELLING
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DL. 9:4687-4695(1989).
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ES. COMMUN. 169:346-351(1990)
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                                                                                                                                               305:47-56(1991).
                                                        82-92
                                                                                                                                                          E.J.;
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                        LENAERTS J.-P., BILIAU A., COMMUN. 167:904-909(1990).
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BGAL_ASPOF
INV1_DAUCA
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                                                                               86:1850-1854(1989)
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                                                                                                  E.J.,
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BETA-GALACTOSIDASE PRE
BETA-FRUCTOFURANOSIDAS
RETINAL DEGENERATION B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                G.G.;
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                                                                                                                                                                                                                                                                                 J.D.,
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                                  DAMME
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EMBL; M30816; G386961
EMBL; M31625; G386961
EMBL; M31625; G386961
EMBL; M28426; G398009
EMBL; X14768; G34514;
EMBL; M37719; G487124
EMBL; M37719; G487124
EMBL; M28225; G338007
EMBL; M28225; G338007
EMBL; M28225; G338007
EMBL; M28224; G338007
EMBL; S69738; G545465
EMBL; S71513; G240868
EMBL; A17786; G641145
PIR; A35474; A35474.
CHAIN
MOD_RES
DISULFID
DISULFID
CARBOHYD
VARIANT
MUTAGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                      KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.;
FEBS LETT. 395:277-282(1996).
-I- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND BASOPHILS
BUT NOT NEUTROPHILS OR EOSINOPHILS. AUGMENTS MONOCYTE ANTI-TUMOR
ACTIVITY. HAS BEEN IMPLICATED IN THE PATHOGENESIS OF DISEASES
CHARACTERIZED BY MONOCYTIC INFILTRATES, LIKE PSORIASIS, RHEUMATOID
ARTHRITIS OR ATHEROSCLEROSIS. MAY BE INVOLVED IN THE RECUUITMENT
OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF
                                                                                                                                   PDB;
PDB;
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PDB;
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ZHANG Y.J., RUTLED
J. BIOL. CHEM. 269
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HANDEL T.M., DOMAILLE P.J.;
BIOCHEMISTRY 35:6569-6584(1996).
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GRONENBORN A.M., CLORE G.M.;
PROTEIN ENG. 4:263-269(1991).
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WEBER M., UGUCCIONI M.,
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LUBKOWSKI J., BUJI
                                                                                        SIGNAL
                                                                                                     CYTOKINE;
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                                                                                                              PROSITE;
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                                                                                                                                                                                                            L; M31626; G386961; -...
L; M31626; G386961; JOINED.
L; M31628; G386961; JOINED.
L; M24545; G307163; -...
L; M28226; G338009; -...
L; X14768; G345124; -...
L; M37719; G487124; -...
L; M28225; G338007; -...
L; M28225; G338007; JOINED.
L; M28223; G338007; JOINED.
L; M28224; G338007; JOINED.
L; S69738; G545465; -...
L; S71513; G240888; -...
L; A17786; G641145; -...
                                                                                                                                                                                                                                                                                                                                                                      ATHEROSCLEROSIS.
SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.
PTM: PROCESSING AT THE N-TERMINUS CAN REGULATE RECEPTOR AND TARGET CELL SELECTIVITY. DELETION OF THE AMINO- TERMINAL RESIDUE CONVERTS IT FROM AN ACTIVATOR OF BASOPHIL TO AN EOSINOPHIL CHEMOATTRACTANT.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
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                                                                                                             158105; -.
ITE; PS00472;
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                                                                                                                                                                                                                                                                                                                                                               (CHEMOKINE CC).
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                                                                                                    CHEMOTAXIS;
                                                                                                                                   14-OCT-96.
15-OCT-94.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     183:681-685(1996)
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269:15918-15924(1994).
                                                                                                              SMALL_CYTOKINES_CC;
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                                                                                                    SIGNAL;
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POTENTIAL.
A -> T.
MISSING: LOSS
MISSING: LOSS
                                                                  MONOCYTE CHEMOTACTIC PREPAREDLIDONE CARBOXYLIC
                                                                                                 INES_CC; 1.
INFLAMMATORY RESPONSE; 3D-STRUCTURE
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ACTIVITY.
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SEQUENCE
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01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1A PRECURSOR (MCP-1A) (MCP-1) (ACIDIC SEMINAL FLUID PROTEIN).
BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                             C-C) (CHEMOKINE CC).
EMBL; L32659; G624394; -.
EMBL; M84602; G163395; -.
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PIR; JC2336; JC2336.
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WEMPE F., EINSPANI
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TISSUE-SEMINAL PLA
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MEDLINE; 92096117.
WEMPE F., HENSCHEN A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EUTHERIA;
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CADPKQKWVQ 84
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                                                                                                                                                                                                                                                                    PS00472; SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                    KUHLMANN J.K., SCHEIT K.H.;
BIOPHYS. RES. COMMUN. 202:1272-1279(1994).
ION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HENSCHEN A., SCHEIT K.H.;
BIOL. 10:671-679(1991).
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                                                                                                                                                                                                                                                                                                                                                                                                    THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
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MISSING: 83% REDUCTION IN ACTIVITY
D-A: 90% REDUCTION IN ACTIVITY.
N-A: 50% REDUCTION IN ACTIVITY.
R->F: 95% REDUCTION IN ACTIVITY.
S->Q: 40% REDUCTION IN ACTIVITY.
Y-D: LOSS OF ACTIVITY.
R->L: LOSS OF ACTIVITY.
D->L: 90% REDUCTION IN ACTIVITY.
                                                    Score 84;
Pred. No.
0; Misma
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Pred. No. 5
0; Mismat
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D->L: 90%
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                                                                                                                                           MONOCYTE CHEMOTACTIC PROTEIN 1A.
PYRROLLDONE CARBOXYLIC ACID (BY
SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
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                                                  e 84; DB 1; Len
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Mismatches 0;
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d. No. 5.05e-07;
Mismatches 0;
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01-NOV-1995 (REL.
01-NOV-1995 (REL.
15-JUL-1998 (REL.
           KUMAR A.G., BALLANYINE C.M., MICHAEL L.H., KUKIELKA G.L., YOUKER K.A.
LINDSEY M.L., HAWKINS H.K., BIRDSALL H.H., MACKAY C.R., LAROSA G.J.,
ROSSEN R.D., SMITH C.W., ENTMAN M.L.;
CIRCULATION 95:693-700(1997).
-1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
NEUTROPHILS. IMPORTANT FACTOR IN THE COURSE OF THE INFLAMMATORY
REACTION TO REPERFUSION OF THE PREVIOUSLY ISCHEMIC MYOCARDIUM.
MAY PLAY A SIGNIFICANT ROLE IN MONOCYTE TRAFFICKING INTO THE
REPERFUSED MYOCARDIUM.
-1- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
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DISULFID
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                          SCYA2 OR MCP1.
CANIS FAMILIARIS (DOG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                              P52203;
01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1)
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CYTOKINE;
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01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDAT
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (M
CHEMOATTRACTANT PROTEIN 2).
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DNA CELL BIOL. 13:1-8(1994).
-I-FUNCTION: CHEMOTACTIC FACTOR
CAN BIND HEPARIN.
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
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-!- SIMILARITY: BELONGS
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INDUCTION: BY TNF-ALPHA.
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TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
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5.05e-07;
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                                                                                                                                                                                           MACKAY C.R., LAROSA G.J.,
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MOD_RES
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-:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
EMBL; U29653: G1144186; -.
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YOSHIMURA T., YUHKI N.;
J. IMMUNOL. 146:3483-3488(1991).
J. IMMUNOL. 146:3483-3488(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
15-UL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
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EUKARYOTA; METAZOA; CHORDATA;
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- SUBUNIT: MONOMER OR H
- SIMILARITY: BELONGS T
C-C) (CHEMOKINE CC).
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Similarity 100.0%;
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Similarity 100.0%;
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CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE
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TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
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BY SIMILARITY.

MONOCYTE CHEMOTACTIC PROTEIN 1.
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BY SIMILARITY.
A7075B14 CRC32;
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                                                                                                                                                                                                                                                        POTENTIAL
                                                                                                                                                                                                                                                                                                           BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                             PYRROLIDONE CARBOXYLIC SIMILARITY).
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                  PRT;
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                                                                                                                                                                  9 84; DB 1;
. No. 5.05e-07;
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No. 5.05e-07
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Best Local S
Matches
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DISULFID
SEQUENCE
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SIGNAL
                                                             UGUCCIONI M., LOETSCHER P., FORSSMANN U., LI Y., KREIDER B., GAROTTA G., THELEN M., J. EXP. MED. 183:2379-2384(1996).
                                                                                                                                                                                                                   MEDLINE; 97113354.
GARCIA-ZEDEDA E.A., COMBADIERE C.,
LAVIGNE F., HAMID Q., MURPHY P.M.,
J. IMMUNOL. 157:5613-5626(1996).
                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA; METAZOA;
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; 248479; G683717;
EMBL; X79416; G872313;
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01.NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. TISSUE-HEART;
                                                                                                                                                                                                                                                                                                                                                                                                                                        SCYA13 OR MCP4 OR NCC1.
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-!- SUBUNIT: MONOMER OR
-!- SIMILARITY: BELONGS
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUBMITTED (JUL-1994)
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ZACH O.R.F.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EUTHERIA; ARTIODACTYLA.
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EUKARYOTA; METAZOA; CHORDATA;
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TISSUE-FETAL;
                    SEQUENCE FROM N.A.,
                                                                                                                               MEDLINE;
                                                                                                                                                 TISSUE-FETAL
                                                                                                                                                                        SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                    HOMO SAPIENS (HUMAN)
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: CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE
                                                                                                                               96235049
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                      AND
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                      SEQUENCE
                                                                                                                                                                          SEQUENCE OF 17-98
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Pred. No.
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BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
CARBOXYLIC ACID (BY
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BY SIMILARITY.
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LUSTER A.D.;
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. 8.83e-07;
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                                                                                    DEWALD B.,
BAGGIOLINI
                                                                                                          DEWALD
                                                                                                                                                                                                                                                                                                                                                                                               TETRAPODA; MAMMALIA;
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Е.,
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                                                                                 M.;
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                                                                                                        LIMA S.H.,
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Best Local
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DANTE M., GIBSON A.;

SUBMITTED (AGC-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

-I- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES,

BASOPHILS AND EOSINOPHILS, BUT NOT NEUTROPHILS. SIGNALS THROUGH

CCR2B AND CCR3 RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF

EUNCCYTES AT BOTH SIDES OF ALLERGIC AND NONALLERGIC INFLAMMATION.

MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL

WALL DURING THE DISEASE PROCESS OF ARTHEROSCLEROSIS. MAY PLAY A

ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO

EXOGENOUS PATHOGENS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
DISULFID
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL
CHAIN
MOD_RES
                                                                                                                                                                                                                               CAVIA PORCELLUS (GUINEA PIG).
EUKARYOTA; METAZOA; CHORDATA;
EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                          01-JUN-1994 (REL.
01-OCT-1996 (REL.
15-JUL-1998 (REL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BERKHOUT T.A., SARAU H.M., MOORES K., WHITE J.R., ELSHOURBAGY APPELBAUM E., REAPE T.J., BRAWBER M., MAKWANA J., FOLEY J.J., SCHALDT D.B., IMBURGIA C., MACNULTY D., MATTHEWS J., O'DONNELI O'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPHEE C.; J., BIOL. CHEM. 272:16404-16413(1997).
SEQUENCE FROM N.A. MEDLINE; 95091818.
                                                                             ROTHENBERG M.E., LUSTER A.D., LILLY C.M., J. EXP. MED. 181:1211-1216(1995).
                                                                                                                       TISSUE-LUNG;
MEDLINE; 95173589.
                                                                                                                                                                                                                                                                                                                                  EOTAXIN PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
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                                                                                                                                                                             SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 CADPKQKWVQ 10
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MASS SPECTROMETRY: MM-8760; MM_ERR-30; METHOD-MALDI; RANGE-22-98.
MASS SPECTROMETRY: MM-8575; MM_ERR-30; METHOD-MALDI; RANGE-24-98.
MASS SPECTROMETRY: MM-8575; MM_ERR-30; METHOD-MALDI; RANGE-24-98.
INDUCTION: BY INTERLEUKIN-1 AND TWF-ALPHA.
TISSUE SPECIFICITY: WIDELY EXPRESSED. FOUND IN SMALL INTESTINE,
TISSUE SPECIFICITY: WIDELY EXPRESSED. FOUND IN SMALL INTESTINE,
THYMUS, COLON, LUNG, TRACHEA, STOMACH AND LYMPH NODE. LOW LEVELS
SEEN IN THE PULMONARY ARTERY SMOOTH MUSCLE CELLS.
THIS PROTEIN CAN BIND HEPARIN.
PTM: ONE MAJOR ISOFORM MCP-4, AND TWO MINOR ISOFORMS (LA)MCP-4 AND
(FNPOGLA)MCP-4 ARE PRODUCED BY DIFFERENTIAL SIGNAL CLEAVAGE.
(LA)MCP-4 ARE PRODUCED BY DIFFERENTIAL SIGNAL CLEAVAGE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
L; U46767; G1732123; -.
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T.A., SAF
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AA;
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34, LAST SEQUENCE UPDATE)
36, LAST ANNOTATION UPDAT
(EOSINOPHIL CHEMOTACTIC P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95.2%;
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Pred.
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DF52F6EC CRC32;
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                                                                                                                                                                                                                                                                                                                               NOTATION UPDATE)
CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GLYCOPROTEIN; INFLAMMATORY RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NO ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; L
4.64e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               96
                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                     TETRAPODA; MAMMALIA;
                                                                                                  DRAZEN J.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROTEIN 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
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                                                                                                  LEDER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
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Best Local S
Matches
TISSUE-SMALL INTESTINE;
TISSUE-SMALL INTESTINE;
MEDLINE; 96205964.
KITAURA M., NAKAJIMA T., IMAI T., HARADA S.,
TIEFANY H.L., MURPHY P.M., YOSHIE O.;
TIEFANY H.L., MURPHY P.M., YOSHIE O.;
TIEFANY H.C., PARAMETER P.M., YOSHIE O.;
                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID
DISULFID
CARBOHYD
CONFLICT
                                                                                           SMITH H.,
MACKAY C.F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-NOY-1997 (REL. 35, LAST ANNOTATION UPDATE)
EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     [3]
SEQUENCE OF 24-96.
SEQUENCE OF 24-96.
                                                  SEQUENCE FROM N.A.
TESTIE-SMALL INTESTINE;
                                                                                                                                                               GARCIA-ZEPEDA E.A.,
LUSTER A.D.;
                                                                                                                                                                                                                                                                                            EOTA_HUMAN STANDARD; P
P51671; P50877; Q92490; Q92491;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN-HARTLEY; T. MEDLINE; 94157409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOSE P.J., ADCOCK I.M., GRIFFITHS-JOHNSON D.A., BERKMAN N., WELLS T.C., WILLIAMS T.J., POWER C.A.; BIOCHEM. BIOPHYS. RES. COMMUN. 205:788-794(1994).
                                                                                                              PONATH P.D.,
                                                                                                                        SEQUENCE FROM N.A. MEDLINE; 96189937.
                                                                                                                                                                                   SEQUENCE FROM N.A. MEDLINE; 96181758.
                                                                                                                                                                                                                EUTHERIA; PRIMATES.
                                                                                                                                                                                                                         EUKARYOTA;
                                                                                                                                                                                                                          HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; C
                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EOSINOPHIL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOSE P.J., GRIFFITHS-JOHNSON D.A.,
                                                                                                                                                      NAT. MED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE;
                                                                                                                                                                                                                                                                                                                                                                 72 CADPKKKWVQ 81
                                                                                  CLIN.
                                                                                                                                                                                                                                                                                                                                              CADPKQKWVQ 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           U18941; G687656; -. x77603; G602552; -. P13500; 1MCA.
                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                             .
70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PS00472; SMALL_CYTOKINES_CC; 1. II; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
                                                                                  INVEST.
                                                                                                     SHI X.,
                                                                                                                                                      2:449-456(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                           96 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                    Y RESPONSE.

1 96
24 96
31 56
31 56
32 72
32 72
93 93
88 88
AA; 10753
                                                                                                                                                                                                                                                                                                                                                                                     91.7%;
larity 90.0%;
Conservative
                                                                                                               QIN S.,
                                                                                 97:604-612(1996).
                                                                                                     GONZALO
                                                                                                                                                                          ROTHENBERG
                                                                                                                                                                                                                        CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                   RINGLER D.J.,
NZALO J.A., NEW
                                                                                                                                                                                                                                                                                                                                                                                                                            Œ;
                                                                                                                                                                                                                                                                                                                                                                                                                                   EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
POTENTIAL.
D -> G (IN REF
                                                                                                                                                                                                                                                                                                                                                                                    Score 77; DB 1; I
Pred. No. 2.39e-05;
0; Mismatches 1
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                                                                                                                                                                         M.E.,
                                                                                                     NEWMAN
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                                                                                                    CLARK-LEWIS I., WANG J., WMAN W., GUTIERREZ-RAMOS
                                                                                                                                                                                                                                                                                                                                                                                                                                     (IN REF.
                                                                                                                                                                          OWNBEY
                                                                                                                                                                                                                                                                                                       97
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                         T.R.,
                                  COMBADIERE
                                                                                                                                                                                                                                                                                                                                                                                                                                   2)
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                                                                                                                                                                          LEDER
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                                  c.,
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                                                                                                               J., KASSAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              THIS PROTEIN
                                                                                                     J.C.,
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- PTM: O-GLYCOSYLATED (PROBABLE).
-!- INDUCTION: BY TNF-ALPHA, IL-1-ALP
-!- SIMILARITY: BELONGS TO THE INTERC
C-C) (CHEMOKINE CC).
EMBL: U46573; G1280141; --
EMBL: U46573; G1185440; --
EMBL: U34780; G1185441; --
EMBL: D49372; G1552241; --
EMBL: Z69291; E221070; --
EMBL: Z75668; E251275; --
EMBL: Z75668; E251275; --
EMBL: Z75669; E251258; --
EMBL: Z75669; E251258; --
EMBL: Z75699; E329504; --
EMBL: Z92709; E329504; --
                                                                                                                                                                                                                                 P48298;
01-FEB-1996
01-FEB-1996
15-JUL-1998
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DISULFID
VARIANT
VARIANT
VARIANT
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BARTELS J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GARCIA-ZEPEDA E.A., ROTHEN MORTON C.C., LUSTER A.D.; GENOMICS 41:471-476(1997).
                                                                                                             MUS MUSCULUS (MOUSE)
EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-PLACENTA;
MEDLINE; 97312708.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHRISTOPHERS E., SCHROEDER BIOCHEM. BIOPHYS. RES. COMP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE; 96
BARTELS J.,
                                                                                     EUTHERIA; RODENTIA.
                                                                                                                                                                             SCYA11
                                                                                                                                                                                                     EOTAXIN PRECURSOR
                                                                                                                                                                                                                                                                                                                                                    EOTA_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00472; SMALL_CYTOKINES_CC; EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BIOCHEM. BIOPHYS. RES. COMMUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. TISSUE-LUNG;
   TISSUE=LUNG;
                           SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 97445071.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE-FORESKIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73 CADPKKKWVQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 CADPKQKWVQ 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, & FEATURE OF ALLERGIC INFLAMMATORY REACTIONS.
                                                                                                                                                                                                                                                                                                                                                                                10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBCELLULAR LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SCHLUETER C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96374440.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97
                                                                                                                                                                                         (REL. 33, CREATED)
(REL. 33, LAST SEQUENCE UPDATE)
(REL. 36, LAST ANNOTATION UPDATE)
CURSOR (EOSINOPHIL CHEMOTACTIC PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYTOKINE; (
RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SCHLUETER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91.7%;
larity 90.0%;
Conservative
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32
33
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79
                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10732 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE OF 60-65 AND 75-88, AND VARIANTS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ROTHENBERG A.D.;
                                                                                                             CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ი
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KULKE R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EXTRACELLULAR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RICHTER E., R J.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 L -> P (IN CLONE : R -> S (IN CLONE : K -> R (IN CL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 77; DB 1; Pred. No. 2.39e-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IL-1-ALPHA AND INTERFERON GAMMA.

IE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EOTAXIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          POTENTIAL.
                                                                                                             VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6C0F3D98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       225:1045-1051(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              237:537-542(1997)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHRISTOPHERS E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WEREMOWICZ S.,
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                                                                                                                                                                                                                                                                                                                                                       97
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                                                                                                             TETRAPODA;
                                                                                                                                                                                                  PROTEIN).
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53).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97;
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                                                                                                             MAMMALIA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   THIS PROTEIN
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TRESULT
AC PROPERTY TO THE PRO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
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Best Local
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DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EOTA_RAT STANDARD; PRT; 97 AA.

P97545; 008780;
15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
                                                          SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

-!- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS P DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, A PROMI FEBRUARE OF ALLERGIC INFLAMMATORY REACTIONS (BY SIMILARITY)
-!- SUBCELLULAR LOCATION: EXTRACELLULAR.
-!- PTM: O-GLYCOSYLATED (PROBABLE).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL C. C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. WILLIAMS C.M., NEW FLANAGAN B.F.;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
RATTUS NORVEGICUS (RAT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IMMUNITY 4:1-14(1996).

1- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTE-
DIRECTLY PROMOTES THE ACCUMULATION OF EOSIMOPHILS (A PROMINENT FEATURE OF ALLERGIC INFLAMMATORY REACTIONS), BUT NOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 96158746.
GONZALO J.-A., JIA G.-Q.,
JENKINS N.A., LIN G.-S.,
GUTIERREZ-RAMOS J.-C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 96004658.
ROTHENBERG M.E., I
PROC. NATL. ACAD.
                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBMITTED (DEC-1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73 CADPKKKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CADPKOKWVO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CELLS), INTESTINE, HEART, SPLEEN, KIDNEY.
INDUCTION: BY INTERFERON-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
PTM: O-GLYCOSYLATED (PROBABLE).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LYMPHOCYTES, MACROPHAGES OR NEUTROPHILS.
SUBCELLULAR LOCATION: EXTRACELLULAR.
TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN THE THYMUS.
EXPRESSION INDUCTBLE IN THE LUNG (TYPE I ALVECLAR EPITHELIAL
CELLS), INTESTINE, HEART, SPLEEN, KIDNEY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; U26426; G995911; -.; U40672; G1113937; -.
MGI:103576; SCYA11.
                             C) (CHEMOKINE CC).
Y08358; E274141; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               h 91.7%;
Similarity 90.0%;
9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97
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1 23
24 97
32 57
33 73
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JIA G.-Q.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NEWTON D.J., WILSON S.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10
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. SCI. U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE-LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10893
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL/GENBANK/DDBJ DATA BANKS.
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KATZ H., LICI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 77; DB 1; I
Pred. No. 2.39e-05;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       POTENTIAL.
EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
F85A96BC CRC3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LEDER P.;
92:8960-8964(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     H., LICHTMAN A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FRIEND D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COLEMAN J.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COPELAND N.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COYLE A.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                       (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                THIS PROTEIN
                                                                                                                                                                                                                                               PROMINENT
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Best Local S
Matches
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CONFLICT
SEQUENCE
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                                                                                                                                                                                                                                      SEQUENCE FROM N.A.

MEDLINE; 93305913.

MINTY A., CHALON P., GUILLEMOT J.C., KAG

MAGAZIN M., MILOUX B., MINTY C., RAMOND

SHIRE D., FERRARA P., CAPUT D.;

EUR. CYTOKINE NETW. 4:99-110(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-DEC-1992 (REL. 24, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (MCP-3) (MONOCYTE CHEMOTACTIC PROTEIN 3) (NC28).
                               BIOCHEMISTRY 36:4412-4422(1997).
-:- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND
-:- EOSINOPHILS, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. ALSO INDUCES THE RELEASE OF GELATINASE B. THIS PROTEIN CAN BIND HEPARIN.
                                                                                                                                                                                                                                                                                                               OPDENAKKER G., FITEN P., NYS
LAUREYS G., VAN DAMME J.;
GENOMICS 21:403-408(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL
           ÷ ÷
                                                                                            STRUCTURE BY NMR. MEDLINE; 97263733.
                                                                                                                                      KIM K.-S
                                                                                                                                                       STRUCTURE BY NMR, AND SUBUNIT
                                                                                                                                                                                          VAN DAMME
                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A., AND SEQUENCE OF 31-67 AND 71-MEDLINE; 93213290.
OPDENAKKER G., FROYEN G., FITEN P., PROOST P., VABIOCHEM. BIOPHYS. RES. COMMUN. 191:535-542(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                  EUTHERIA; PRIMATES
                                                                                                                                                                                                                                                                                                                                                                                                                                         HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               SCYA7 OR MCP3.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE;
                                                                                                                                                MEDLINE; 97053697
                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                   MEUNIER S., BERNASSAU J.-M.,
                                                                                                                                                                                                                       SEQUENCE OF 30-99
                                                                                                                                                                                                                                                                                                                                                MEDLINE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73 CADPKKKWVQ 82
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   SIMILARITY:
           PTM: O-GLYCOSYLATED.
                       SUBUNIT: MONOMER.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
9; Conser
                                                                                                                                                                                                  92308855.
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                                                                                                                                                                            J., PROOST P., LENAERTS J.-P., ED. 176:59-65(1992).
                                                                                                                         RAJARATHNAM K., C. 395:277-282(1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97
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24 97
32 57
32 73
94 94
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larity 90.0%;
Conservative
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333
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 BELONGS
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INE; CHEMOTAXIS; GLYCOP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MW;
                                                                                                                                     CLARK-LEWIS
THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
Pred.
                                                                                GUILLEMOT J.-C.,
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L -> S (IN REF.
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BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                         VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05B4ED45 CRC32
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1. No. 2.39e-05;
Mismatches 1;
                                                                                                                                                                                                                                                                                                                                     FROYEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GLYCOPROTEIN;
                                                                                                                                                                                                                                                            KAGHAD M., LIAUZUN P.
OND P., VITA N., LUPKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99
                                                                                                                                     Ι.,
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                                                                                                                                                                                       OPDENAKKER G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                         TETRAPODA; MAMMALIA;
                                                                                                                                     SYKES
                                                                                                                                                                                                                                                                                                                                    VAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                 FERRARA P.,
                                                                                                                                                                                                                                                                                                                                                                                                            71-99
                                                                                                                                                                                                                                                                                                                                                                                      VAN DAMME
                                                                                                                                                                                                                                                                                                                                    ROY N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL;
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                                                                                                                                                                                                                                                              LUPKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97;
                                                                                                                                                                                                                                                                                                                                    SPELEMAN
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                                                                                 DARBON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                              <u>ب</u>
:
                                          PROTEIN
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Query Match
Best Local s
Matches
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Best Local
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EMBL; X73308; G313708; ALT_INIT.

EMBL; X73309; -; NOT_ANNOTATED_CDS.

EMBL; X71087; G288399; -.

EMBL; X71087; G288398; ALT_INIT.

EMBL; X71087; G288397; ALT_INIT.

EMBL; X71087; G288397; ALT_INIT.

EMBL; X71087; G288397; ALT_INIT.

EMBL; X71087; G288397; ALT_INIT.

PIR; JC1478; JC1478.
                                                 DISULFID DISULFID
                                                                                                                                                                                                                                                                                                           MCP2_PIG STANDARD; PRT; 99 AA. P49873; 01-OCT-1996 (REL. 34, CREATED) 01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE) MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOD_RES
DISULFID
DISULFID
CARBOHYD
                                                                                            CHAIN
                                                                                                                                                                                     BIOCHEM. BIOPHYS. RES. COMMUN. 205:148-153(1994).
                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE; 95091716.
HOSANG K.K., KNOKE I.I., KLAUDINY J.J., WEMPE F.F.,
SCHEIT K.K.;
                                          SEQUENCE
                                                                                  MOD_RES
                                                                                                                                     EMBL;
                                                                                                                                             -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                  SCYA8 OR MCP2.
SUS SCROFA (PIG).
                                                                                                                                                                                                                                                                                                       CHEMOATTRACTANT PROTEIN 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CYTOKINE;
                                                                                                       SIGNAL
                                                                                                                 CYTOKINE;
                                                                                                                           PROSITE;
                                                                                                                                                                                                                                                               EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                                                                         EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                75 CADPTQKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                             1 CADPKQKWVQ 10
                                                                                                                                                                            CAN BIND HEPARIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A54678; A54678
                                                                                                                           Z48480; G683719;
IE; PS00472; SMALI
           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PS00472; SMALL_CYTOKINES_CC; : CHEMOTAXIS; HEPARIN-BINDING;
  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                 CHEMOTAXIS;
                                           99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESPONSE;
  Conservative
                                          ΑĄ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A.
                                                                                                              SMALL_CYTOKINES_CC; 1.
XIS; SIGNAL; HEPARIN-BINDING;
        91.7%;
90.0%;
                                          10903
                                                                                                                                                                                                                                                                                                                                                                                                                                                               91.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11200
                                                                                                                                                                                                                                                                         CHORDATA;
                                                      59
75
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24
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                                          WW;
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Score
Pred.
0; M
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 77; DB 1; I
Pred. No. 2.39e-05;
                                                                      BY SIMILARITY.

MONOCYTE CHEMOTACTIC PROTEIN 2.

PYRROLIDONE CARBOXYLIC ACID (BY
SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T -> K (IN REF. 4).
MISSING (IN REF. 4).
7502E19C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MONOCYTE CHEMOTACTIC PR
PYRROLIDONE CARBOXYLIC
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   POTENTIAL
T -> K (II
                                                                                                                                                                                                                                                                         VERTEBRATA;
                                          B7620BCF
                                                   SIMILARITY.
  Mismatches
         N 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
         DB 1; I
2.39e-05;
                                         CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GLYCOPROTEIN; SIGNAL;
                                                                                                                                                                                                                                                                         TETRAPODA; MAMMALIA;
                 Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;
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                                                                                                                 INFLAMMATORY RESPONSE
                                                                                                                                                                                                                                                                                                                  (MONOCYTE
 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
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                                                                                                                                                                                                                      WUTTKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACID
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                                                                                                                                                       (SMALL CYTOR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
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 Gaps
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 0;
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75 CADPQQKWVQ 84

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CADPKQKWVQ 10

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Best Local S
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID
DISULFID
CARBOHYD
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MCP1_CAVPO STANDARD; PRT; 120 AA. 208782; 01-NOV-1995 (REL. 32, CREATED) 01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE) MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOTATTANT PROTEIN-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MI1A_RAT P50229;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQ
01-NOV-1997 (REL. 35, LAST ANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MACROPHAGE INFLAMMATORY PROTEIN SCYA3 OR MIP1A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAVIA PORCELLUS (GUINEA PIG).
EUKARYOTA; METAZOA; CHORDATA;
   SEQUENCE OF 24-57
STRAIN-WISTAR;
                                                                                                                      MEDLINE; 9523
SHANLEY T.P.,
                                                                                                                                            STRAIN-LONG EVANS; TISSUE-LUNG; MEDLINE; 95238980.
                                                                                                                                                                                                                                                                         BIOCHEM. BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                        SHI M.M.,
                                                                                                                                                                                                                                                                                                                                 STRAIN=CD-1; TISSUE=LUNG; MEDLINE; 95298037.
                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RATTUS NORVEGICUS (RAT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            J. IMMUNOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN=Z; TISSUE=SPLEEN; MEDLINE; 93267104.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SCYA2 OR MCP1
                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                          IMMUNOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IMMUNOL. 150:5025-5032(1993).
FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CADPTQKWVQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                L04985;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHEMOTAXIS; SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RODENTIA.
                                                                                                                                                                                                                                                                   GODLESKI J.J., PAULAUSKIS J.D.;
IOPHYS. RES. COMMUN. 211:289-295(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                           RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          33
34
97
120
                                                                                          154:4793-4802(1995)
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llarity 90.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24
                                                                                                                      SCHMAL H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23
120
24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHORDATA;
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73
97
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LAST ANNOTATION UPDATE)
RY PROTEIN 1-ALPHA PRECURSOR
                                                                                                                FRIEDL H.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ¥.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 77; DB 1; I
Pred. No. 2.39e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    POTENTIAL.
22FAD257 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PYRROLIDONE CARBOXYLIC SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MONOCYTE CHEMOTACTIC PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                      JONES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92
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                                                                                                                   M.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 120;
                                                                                                                   WARD P.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MIP-1-ALPHA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACID
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Best Local S
Matches
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ILB_CANFA
P41324;
01-FEB-1995
01-FEB-1995
01-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHAIN
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 96183056.

MAKAGAWA H., SHIOTA S., TAKANO K., SHIBATA F., KATO H.;

BIOCHEM. BIOPHYS. RES. COMMUN. 220:945-948(1996).

-1- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.

HAS CHEMOTACTIC ACTIVITY FOR MONOCYTES, NEUTROPHILS, EOSINOPHILS,

BASOPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG THY-ALPHA

PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AND

MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE

PRODUCTION OF TWF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR

ADDESION MOLECULES REQUIRED FOR NEUTROPHIL INFLUX. THIS PROTEIN
KURIELRA G.L., SMITH W.C., LAROSA G.J., MANNING A.M.,

MENDOZA L.H., DALY T.J., HUGHES B.J., YOUKER K.A., HAWKINS H.K.,

MICHAEL L.H., ROT A., ENTMAN M.L.;

J. CLIN. INVEST. 95:89-103(1994).

-I- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,

BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN

NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN

RESPONSE TO AN INFLAMMATORY STIMULUS.

-I- SUBUNIT: HOMODIMER.

-I- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE)
                                                                                                                                                                                                                                                                                                                                      MATSOMOTO Y., MOHAMED A., ONODERA T., KATO H., OHASHI T.,
GOITSUKA R., TSUJIMOTO H., HASEGAWA A., FURUSAWA S., YOSHIHARA K.,
ISHIKAWA J., HOTTA K., SUZUKI K., HIROTA Y.;
CYTOKINE 6:455-461(1994).
                                                                                                                                                                                                                                                   STRAIN-MONGREL; TISSUE-JUGULAR VEIN; MEDLINE; 95114148.
                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-LYMPH NODE;
MEDLINE; 95127913.
MATSUMOTO Y., MOHAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CANIS FAMILIARIS (DOG)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -!- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
-!- SIMILARITY: BELONGS TO THE INTERCRINE B
C-C) (CHEMOXINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
MEDLINE; 94010328.
ISHIKAWA J., SUZUKI S.,
GENE 131:305-306(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EUTHERIA; CARNIVORA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INTERLEUKIN-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73 CADPKETWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 CADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BINDS HEPARIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  U22414; G790633; -
U06435; G459150; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PS00472; SMALL_CYTOKINES_CC; 1.; CHEMOTAXIS; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (REL. 31, CREATED)
(REL. 31, LAST SEQUENCE UPDATE)
(REL. 32, LAST ANNOTATION UPDATE)
-8 PRECURSOR (IL-8).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          35
35
57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AΑ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82
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92
57
73
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10335
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        86.9%;
          TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HOTTA K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score
Pred.
1; M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA. BY SIMILARITY. BY SIMILARITY. A -> T (IN REF. 2). C -> W (IN REF. 2 AND 3). F48CF89F CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HIROTA Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73; DB 1; I
No. 2.03e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BETA FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MIZUNO S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUZUKI K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
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                                         Matches
                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LT 17

IL8_RABIT STANDARD; PRT; 101 AA.

P19874;

01-FEB-1991 (REL. 17, CREATED)

01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)

01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)

INTERLEUKIN-8 PRECURSOR (IL-8) (NEUTROPHIL ATTRACTANT/ACTIVATION PROTEIN-1) (NAP-1) (PERMEABILITY FACTOR 1) (RPF1).
                                                                                                DISULFID CONFLICT
                                                                                                                                                               -!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS.
-!- SUBBUNIT: HOMODIMER.
-!- SIMBUNIT: HOMODIMER.
-!- SIMBURITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
C-X-C) (CHEMOKINE CXC).
EMBL; M57439; G165553; -.
PIR: S13052; S13052.
HSSP; P10145; S118.
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                    STRAIN-NEW ZEALAND WHITE; TISSUE-PERITONEAL CAVITY; MEDLINE; 91058818.
BEAUBIEN B.C., COLLINS P.D., JOSE P.J., TOTTY N.F., WATERFIELD M.D., WILLIAMS T.J.; BIOCHEM. J. 271:797-801(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; D28772; G517100; -.
EMBL; D14285; G475152; -.
EMBL; D1308; G607814; -.
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHAIN
                                                                                                                                                                                                                                                                                                                                                                                         STRAIN-NEW ZEALAND WHITE;
MEDLINE; 91225489.
                                                                                     SEQUENCE
                                                                                                                                  CHAIN
                                                                                                                                            SIGNAL
                                                                                                                                                       CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                               ORYCTOLAGUS CUNICULUS (RABBIT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                YOSHIMURA T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                        EUTHERIA; LAGOMORPHA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL
                      77 CLDPKEKWVQ 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
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                                                                                                                                                                                                                                                                                                                                                                    IMMUNOL.
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CADPKQKWVQ 10
                                         Similarity
8; Conser
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                                                                                                                                                       CHEMOTAXIS;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                    ., YUHKI N.;
146:3483-3488(1991).
                                         86.9%;
larity 80.0%;
Conservative
                                                                                                 50 34 31
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36
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                                                                                101
61
77
50
11402 MW;
                                                                                                                                                     SMALL_CYTOKINES_CXC; XIS; INFLAMMATORY RESI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22
101
61
77
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score
Pred.
                                                                                            INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
K -> I (IN REF.
                                                    Score 73; DB 1;
Pred. No. 2.03e-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1;
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BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY
                                                                                   -> I (IN REF. 2).
CB32CC30 CRC32;
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                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   73; DB 1; L
No. 2.03e-04;
                                                                                                                                                    CXC; 1.
RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                TETRAPODA;
                                                                                                                                                     SIGNAL
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                                                            Length 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 101;
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                                         Indels
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                                         Gaps
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Best Local S
Matches
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HSSP; P10145; 31L8.

PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.

PROSITE; PS0471; SMALL_CYTOKINES_CXC; 1.

PROSITE; PS0471; PS
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IL8_SHEEP
P36925;
01-JUN-1994
SUBMITTED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IL8_PIG STANDARD; PRT; 103 AA.
P26894; P22951;
01-AUG-1991 (REL. 19, CREATED)
01-AUG-1992 (REL. 23, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8) (ALVEOLAR MACROPHAGE CHEMOTACTIC FACTOR
                                                                                                                                                         SEQUENCE FROM N.A.
MEDLINE; 94103307.
LIN G., PEARSON A.E., SCAMURRA R.W.,
WEISS D.J., MURTAUGH M.P.;
J. BIOL. CHEM. 269:77-85(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OVIS ARIES EUKARYOTA;
                                                              SEQUENCE FROM N.A. SANJANWALA M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEOW H.F., YOSHIMURA T., WOOD P.R., COLDITZ I.G.;
IMMUNCL. CELL BIOL. 72:398-405(1994).
-I- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-I- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-I- SUBTILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS.
-I- SUBUNIT: HOMODIMER.
-I- SUBUNIT: HOMODIMER.
-I- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
CX-C) (CHEMOKINE CXC).
EMBL; 778.306; G463254; -.
EMBL; S74.346; G7865591; -.
PIR; S42496; S42496.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JUN-1994
01-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                        SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                   EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
MEDLINE; 95137691.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENE 150:367-369(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE; 95121931.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INTERLEUKIN-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EGASTELOIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (AMCF-I).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 CADPKQKWVQ
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                               (JUL-1991)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (SHEEP).
METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (REL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STANDARD;
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29, LAST SEQUENCE UPDATE)
32, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             86.9%;
                               ö
                               EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Τ.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 73; D. Pred. No. 2.4
                                                                                                                                                                                                                                                                                                                                                                                                   VERTEBRATA; TETRAPODA; MAMMALIA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ARNAUD
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2.03e-04;
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                               DATA BANKS
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                                                                                                                                                                                                                               BAARSCH M.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 101;
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LJ. BIOL. CHEM. 266:8455-8463(1991).
CHEM. 266:8455-8463(1991).
CHORTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
CHICKLES AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
CHORTOPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
CHORTOPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
CHORTOPHIC ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
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CHORTOPHIC ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
CHORTOPHIC ACTIVATION. IN THE COLOR MACROPHAGES.
CHORTOPHIC ALPHA FAMILY (SMALL CYTOKINE COLOR OF SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE COLOR OF SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE COLOR OF SIMILARITY: GELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE COLOR OF SIMILARITY: GELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE COLOR OF SIMILARITY: GELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE COLOR OF SIMILARITY: GELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE COLOR OF SIMILARITY: GELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE COLOR OF SIMILARITY: GELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE COLOR OF SIMILARITY: GELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE COLOR OF SIMILARITY: GENEL, MOSCOLOR OF SIMILARITY: GENEL, MOSCOLOR OF SIMILARITY: GENEL OF SIMILAR
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Best Local
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SARAFI M.N.,
LUSTER A.D.;
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DISULFID
DISULFID
CONFLICT
                                                                                                                                                                                                     JIA G.-Q., GONZALO J.A., LLOYD C., WERSHIL B.K., GUTIERREZ-RAMOS J.C.; J. EXP. MED. 184:1939-1951(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                            SCYAI2 OR MUSCHUC (MOUSE).
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAROA; CHORDATA;
EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 5 PRECURSOR (MCP
                                                                                      SEQUENCE FROM N.A. MEDLINE; 97149438.
                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE; 97079149.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Q62401;
01-NOV-1997
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BIOCHEMISTRY 31:10483-10490(1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHEMOKINE).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-YORKSHIRE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF 26-45
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GOODMAN R.B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE; 93041741.

GOODMAN R.B., FOSTER D.C., MATHEWES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.,
TISSUE=LUNG;
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A44253; A44253.
; A39819; A39819.
p; P10145; 3ILB.
PSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
SITE; PS0047AXIS; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 h 86.9%;
Similarity 80.0%;
8; Conservative
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                                             GARCIA-ZEPEDA
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BY SIMILARITY.
BY SIMILARITY.
RC -> CR (IN REF. 5).
K -> KK (IN REF. 2).
W; A012D59D CRC32;
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1; M
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Pred. No. 2.03e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERTEBRATA; TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRECURSOR (MCP-5) (MCP-1 RELATED
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                                             MACLEAN
                                                                                                                                                                                                                                                                                    KREMER L.,
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                                         J.A., CHARO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 103;
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                                                                                                                                                                                                                                                                                    MARTINEZ A.C.,
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Best Local
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-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS EOSINOPHILS, MONOCYTES, AND LYMPHOCYTES BUT NOT NEUTROPHILS. POTENT MONOCYTE ACTIVE CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC INFLAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A PIVOTAL ROLE DURING EARLY STAGES OF A PATHOGENS AND MAY PLAY A PIVOTAL ROLE DURING EARLY STAGES OF ALERGIC LUNG INFLAMMATION.

-i- SUBUNIT: HOMODIMER (BY SIMILARITY).

-i- TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND TYMMUS. ALSO FOUND IN THE SALLYARY GLANDS CONTAINING LYMPH NODES, BREALS, HEART, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.

-i- INDUCTION: BY IFN-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
                                                                                                                                                                                                                                                                                                                                                                                                                            01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 4 PRECURSOR (MIP-4) (PULMONARY
ACTIVATED MACROPHAGE CHEMOKINE) (CC CHEMOKINE PARC) (ALITERNATIV
ACTIVATED MACROPHAGE ASSOCIATED CC CHEMOKINE 1) (AMAC-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MIP4_HUMAN
P55774;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DISULFID
           WELLS T.N.C., PEITSCH M.C.;

J. LEUKOC. BIOL. 61:545-550(1997).

-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LY

-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LY

-i- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS

LEVEL EXPRESSION IS SEEN IN LYMPHOID TISSUES
                                                                                                                                                    KODELJA V., MUELLER (
SUBMITTED (AUG-1997)
                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                         HIESHIMA K., IMAI T., BABA M., SHOUDAI
NAKACAWA T., TSURUTA J., TAKEYA M., SAK
MIURA R., OPDENAKKER G., VAN DAMME J.,
J., IMMUNOL. 159:1140-1149(1997).
                                                                                                                                                                                                                                                                TISSUE-AORTA, AND LUNG;
MEDLINE; 97376836.
                                                                                                                                                                                                                                                                                                                       PATENT NUMBER US5504003
                                                                                                                                                                                                                                                                                                                                                                                         HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHAIN
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PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL;
                                                                                                                         DISCUSSION OF SEQUENCE.
                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                             EUTHERIA; PRIMATES
                                                                                                                                                                                                                                                                                                                                                                                                                       SCYA18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -C) (CHEMOKINE CC).
U50712; G1477582; -.
U66670; G1881583; -.
                                                                                                                                                                                                                                                                                                                                                                                                                       OR MIP4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE.

1 22 BY SIMILARITY.
23 104 MONOCYTE CHEMOTACTIC PROTEIN 5.
33 58 BY SIMILARITY.
34 74 BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   104 AA;
                                                                                                                                                      MUELLER C.,
                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
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104
58
74
11659 1
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                                                                                                                                                                                                                                                                                            AND PARTIAL SEQUENCE.
                                                                                                                                                    POLITZ O., HAKIY N
EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 73; DB 1; I
Pred. No. 2.03e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ۳.
                                                                                                                                                                                                                                                                                                                                                                                         VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08FA6C35 CRC32;
                                                                                                                                                                                                                      SHOUDAI K., ISHIZUKA K.,
A M., SAKAKI Y., TAKATSUKI K.,
AMME J., YOSHIE O., NOMIYAMA H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                   HAKIY N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    68
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                                                                                                                                                      DATA BANKS
                                                                                                                                                                   ORFANOS C.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 104
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                            IN THE LUNG. A LOWER
              SUCH
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              AS
                                                      MIGRATION
              LYMPH NODES
                                                                   BUT
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RESULT PROBLEM OF THE PROBLEM OF THE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
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                                MEDLINE: 97053697.

KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.;
FEBS LETT. 395:277--82(1996).

-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES,
BASOPHILS AND EOSINOPHILS. MAY PLAY A ROLE IN NEOPLASTA AND
INFLAMMATORY HOST RESPONSES. THIS PROTEIN CAN BIND HEPARIN.

-i- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.

-i- TISSUE SPECIFICITY: HIGHEST EXPRESSION FOUND IN THE SMALL
INTESTINE AND PERIPHERAL BLOOD CELLS. INTERMEDIATE LEVELS SEEN IN
THE HEART, PLACENTA, LUNG, SKELETAL MUSCLE, THYMUS, COLON, OVARY,
SPINAL CORD AND PANCREAS. LOW, LEVELS SEEN IN THE BRAIN, LIVER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              P80075; P78388;

01-DEC-1992 (REL. 24, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE CHEMOATTRACTANT PROTEIN 2) (HC14).
SCYA8 OR SCYA10 OR MCP2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -1- SIMILARITY: BELONGS TO THE INTERCRINE BE:
C-C) (CHEMOKINE CC).
EMBL; AB000221; D1022520; -.
EMBL; Y13710; E321838; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE;
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                                                                                                                                                                                                                                                                                                                                  TISSUE-OSTEOSARCOMA;
MEDILINE; 92308855.
VAN DANME J., PROOST P., LENAERTS
J. EXP. MED. 176:59-65(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VAN COILLIE E., FITEN P., N
VAN DAMME J., OPDENAKKER G.
GENOMICS 40:323-331(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A., AND VARIANT GLN-69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MCP2_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
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                                                                                                                                                                                                                                                                                           SUBUNIT.
                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 26-99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHANG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BIOCHEM. BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE-BONE MARROW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COILLIE E., FROYEN F., NOMIYAMA H., MIURA R., AELST I., VAN DAMME J., OPDENAKKER G.; CHEM. BIOPHYS. RES. COMMUN. 231:726-730(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INDUCTION: BY LIPOPOLYSACCHARIDE
  INDUCTION: BY INTERFERON GAMMA, MITOGENS AND INTERLEUKIN-1
                           SPLEEN AND PROSTATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SAPIENS (HUMAN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IMMUNOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               H.C.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FROM N.A.
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70
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NOMIYAMA H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred.
1; !
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 71; DB 1; I
Pred. No. 5.81e-04;
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BY SIMILARITY.
052AA3DC CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GLN-69
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                                                                                                                                                                                                                                                                                                                                                         J.-P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GRIFFIN J.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (LPS).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MIURA R.,
                                                                                                                                                                                                                                                                                                                                                         OPDENAKKER G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
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Best Local S
Matches
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Best Local
ILT 24
IL8_CAVPO
P49113;
01-FEB-1996
01-FEB-1996
                                                                                                                                                                                                                                                                                          DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; S8:
PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IL8.
BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
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DISULFID
VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IL8_BOVIN STANDARD; PRT; 101 AA. P79255; 01-NOV-1997 (REL. 35, CREATED) 01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE) 01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE) INTERLEUKIN-8 PRECURSOR (IL-8).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -i- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS (BY SIMILARITY).
-i- SUBUNIT: HOMODIMER (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MORSEY M.A., POPOWYCH Y., KOWALSK. CAMPOS M., BABIUK L.A.; MICROB. PATHOG. 20:203-212(1996).
-i- FUNCTION: IL-8 IS A CHEMOTACT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; X99886; E279930;
EMBL; Y10802; E294088;
HSSP; P13500; 1MCA.
                                                                                                                                                                                                                                                                                                                                                                        SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                          CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. MEDLINE; 96304552.
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PROSITE; PS00472; SMALL_CYTOKINES_CC;
CYTOKINE; CHEMOTAXIS; SIGNAL; HEPARIN
                                                                                                                                                                                                                                                                                                                                                      CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOD_RES
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                                                                                                                                                                           77 CLNPKEKWVQ 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   75 CADPKERWVR 84
                                                                                                                                       1 CADPKOKWVO 10
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                                                                                                                                                                                                                                                                                                                                                                                                                               C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                   Similarity
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101 /
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llarity 70.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24
34
69
                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                            AA;
                                                            STANDARD;
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101
61
77
11291
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70
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59
75
69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Y., KOWALSKI J.,
                                                                                                                                                                                                                                     .08
                                                                                                                                                                                                                                                                                              MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 71; DB 1;
Pred. No. 5.81e-04
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROBABLE.
MONOCYTE CHEMOTACTIC PRO
PYRROLIDONE CARBOXYLIC P
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                          BY SIMILARITY.
BY SIMILARITY.
0E39C526 CRC3
                                                                                                                                                                                                                                 Score 70; DB 1;
Pred. No. 9.79e-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        *
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HEPARIN-BINDING; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5DDD5C20 CRC32;
                                                            PRT;
                                                                                                                                                                                                                   Mismatches
                                                            101
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                                                                                                                                                                                                                                                                                            CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                          SIGNAL
                                                                                                                                                                                                                                                     Length 101;
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(REL. 33, CREATED)
(REL. 33, LAST SEQUENCE UPDATE)

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RESULT RE
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Best Local S
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Best Local Similarity
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DISULFID
SEQUENCE
                                                                                                                                                                                                                                        PROSITE; F
                                                                                                                                                                                                                                                                                                                                          PROOST P., WUYTS A., LENAERTS J.-P., VAN DAMME J.;
BIOCHEMISTRY 33:13406-13412(1994).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT N
NEUTROPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. ALSO IN
THE RELEASE OF GELATINASE B. THIS PROTEIN CAN BIND HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MCPB_BO
P80343;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YOSHIMURA T., JOHNSON D.G.;
J. IMMUNOL. 151:6225-6236(1993).
-:- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-:- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-FEB-1995 (REL. 31, CREATED)
01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1B (MCP-1B) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAVIA PORCELLUS (GUINEA PIG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                        ---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE-KIDNEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE-SPL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 95034774.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-OCT-1996 (REL.
                                                                                                                                                                                                                      NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (NAP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INTERLEUKIN-8
                                                             Local Similarity
                  50 CAEPKXXWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              77 CLDPKKKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 CADPKQKWVQ 10
                                                                                                                                                                                                                                                                                                 PTM: THE N-TERMINAL IS BLOCKED.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUBUNIT: HOMODIMER (BY SIMILARITY).
SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
<u>=</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BOVIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  L04986;
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PS00471; SWALL_CYTOKINES_CXC; 1.
; CHEMOTAXIS; INFLAMMATORY RESPONSE;
; L 2 BY SIMILARITY.
                                                                                                                                                                                                                                 (CHEMOKINE CC).
PS00472; SMALL_CYTOKINES_CC;
CHEMOTAXIS; HEPARIN-BINDING
                                                                                                                                                                                                                                                             PS00472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
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86; G459765; -.
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                                                             82.1%;
larity 70.0%;
Conservative
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larity 80.0%;
Conservative
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                                                                                                                                                    AA,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
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61
77
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8360
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                                                                                                                                                    MW.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WW.
                                                           Score 69;
Pred. No.
1; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BY SIMILARITY.
BY SIMILARITY.
cl3fB521 CRC3
                                                                                                                                               BY SIMILARITY.
BY SIMILARITY.
66172F08 CRC32
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Pred. No. 9.79e-04;
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                                                             Mismatches
                                                                             DB 1; L
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                                                                                                                                                 CRC32
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 101;
                                                                                                    Length 74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2;
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                                                         Gaps
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Best Local S
Matches
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EMBL; M19681; G387168; -.
PIR; A30209; A30209
PIR; A30861; A30861.
PIR; S16226; S16226.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 882345U1.
ROLLINS B.J., MORRI
PROC. NATL. ACAD. (
                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
DISULFID
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KAWAHARA R.S., J. BIOL. CHEM. [2]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MCP1_MOUSE
P10148;
01-MAR-1989
01-MAR-1989
P40224;
01-FEB-1995 (REL. 31, CREATED)
01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
01-FOB-1997 (REL. 35, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
STROMAL CELL-DERIVED FACTOR 1 PRECURSOR (SDF-1) (PRE-B CELL GROWTH
STIMULATING FACTOR) (PBSF) (12-O-TETRADECANOYLPHORBOL 13-ACETATE
REPRESSED PROTEIN 1) (TPAR1) (THYMIC LYMPHOMA CELL STIMULATING FACTOR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PIR; D1042,
HSSP; P13500; 1MCA.
HSSP; P2500; 1MCA.
MGD; MGI:9829; SCYA2.
MGD; MGI:9829; SCYA2.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PROSITE; PS00472; SMALL_CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE;
CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE;
CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE;
CYTOKINE; CHEMOTACTIC PROSITED CHEMOTACTIC PROSI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WEDLINE; 91293127.

VAN DAMME J., DECOCK B., BERTINI R., CONINGS R.

PUT W., OPDENAKKER G., MANTOVANI A.;

EUR. J. BIOCHEM, 199:223-229(1991),

-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAR-1989 (REL. 10, CREATED)
01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (PLATELET-DERIVED GROWTH FACTOR-INDUCIBLE PROTEIN JE).
                                                                                                                                                      SDF1_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- INDUCTION: BY PLATELET-DERIVED GROWTH FACTOR.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE; 89093129.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- SUBUNIT: MONOMER OR HOMODIMER;
-!- INDUCTION: BY PLATELET-DERIVED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 26-42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. MEDLINE; 88234501.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SCYA2 OR MCP1 OR JE.
                                                                                                                                                                                                                                                                       75 CADPKKEWVQ
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                                                                                                                                                                              27
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                                                                                                                                                                                                                                          CADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                            Similarity
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35
126
148
                                                                                                                                                                                                                                                                                                                    82.1%;
llarity 80.0%;
Conservative
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264:679-682(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10
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24
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75
126
                                                                                                                                                                                                                                                                                                                                                                                                           16326 MW;
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                                                                                                                                                                                                                                                                                                                       Score 69; DB 1; I
Pred. No. 1.64e-03;
0; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                       BY SIMILARITY.
BY SIMILARITY.
POTENTIAL.
POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STILES C.D.;
. 85:3738-3742(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PYRROLIDONE CARBOXYLIC SIMILARITY).
                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IN EQUILIBRIUM GROWTH FACTOR.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R.,
                                                                                                                                                                                                                                                                                                                                                              Length 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENAERTS J.-P.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (BY
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Best Local s
Matches
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DISULFID
VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROGENITOR CELLS IN THE PRESENCE OF IL-7 AS WELL AS GROWTH OF THE STROMAL CELL-DEPENDENT B-CELL CLONE DW34 CELLS.

-!- ALTERNATIVE PRODUCTS: TWO DIFFERENT FORMS (ALPHA AND BETA) ARE PROBABLY GENERATED BY ALTERNATIVE SPLICING.

-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C.Y.C.) (CHEMOKINE CXC).

EMBL; D1072; G466457; --
EMBL; L12029; G393180; --
EMBL; L12039; G393180; --
EMBL; L12030; G393182; --
EMBL; D43804; G1304174; --
EMBL; D43805; G1304175; --
EMBL; D43805; G1304175; --
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CYTOKINE;
SIGNAL
CHAIN
                                                                                                 SDF1_HUMAN STANDARD; PRT; 93 AA. P48061; 01-FEB-1996 (REL. 33, CREATED) 01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE) STROMAL CELL-DERIVED FACTOR 1 PRECURSOR (SDF-1) STIMULATING FACTOR) (PBSF).
EUKARYOTA; METAZOA;
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NOMURA M., NAKATA Y., UZAWA A., NOSE M., AKASHI M., SUZ
SUBMITTED (DEC-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- EUNCTION: CHEMOATTRACTANT ACTIVE ON T-LYMPHOCYTES,
NOT NEUTROPHILS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE: 95073497.

JING W. ZHOU P., KAHN S.M., TOM
WINGTEIN I.B.;

EXP. CELL RES. 215:284-293(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
MEDLINE; 93342488.
TASHIRO K., TADA H., HEILKER R.,
SCIENCE 261:600-603(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EUKARYOTA;
EUTHERIA; F
                                                HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PIR; A53497;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAGASAWA T., KIKUTANI
PROC. NATL. ACAD. SCI
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EUKARYOTA: METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                71 CIDPKLKWIQ 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                    1 CADPKQKWVQ 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MGI:103556; SDF1.
SITTE; PS00471; SMALL_CYTOKINES_CXC; FALSE_NEG.
NXINE; CHEMOTAXIS; GROWTH FACTOR; SIGNAL; ALTE
VAL 19
POTENTIAL
19
STROMAL CELL-DERIVE
ILFID 30
55
BY SIMILARITY.
ILFID 32
71
BY SIMILARITY.
PLIC 89
89
89
8 -> KRLKM (IN FORM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FUNCTION: STIMULATES THE PROLIFERATION OF BONE MARROW-DERIVED B
PROGENITOR CELLS IN THE PRESENCE OF IL-7 AS WELL AS GROWTH OF THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RODENTIA.
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                              METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       79.8%;
70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10032 MW;
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. U.S.A. 91:2305-2309(1994).
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Pred.
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BY SIMILARITY.
K --> KRIKM (IN FORM BETA).
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STROMAL CELL-DERIVED FACTOR
                            VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOMITA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       67; DB 1;
No. 4.57e-03
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                            TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ALTERNATIVE SPLICING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAKANO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 89;
                                                                                                                          (PRE-B
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                            MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MONOCYTES,
                                                                                                                          CELL GROWTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HONJO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 79.8% Best Local Similarity 70.0% Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MIA, HUMAN STANDARD; PKI; PRES56; PRES56; PRES56; PRESS6; PRESCUENCE UPDATE) O1-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE) MACROPHACE INFLAMMATORY PROTEIN 3 ALPHA PRECURSOR MACROPHACE INFLAMMATORY PROTEIN 3 ALPHA PROTEIN 3 ALP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              [1]
SEQUENCE FROM N.A.
SPOTILA L.D.;
SUBMITTED (OCT-1994) 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
DISULFID
SEQUENCE
                            HIESHIMA K., IMAI T., OPDENAKKER G., VAN DAMME J., TEI H., SAKAKI Y., TAKATISUKI K., MIURA R., YOSHIE (J. BIOL. CHEM. 272:5846-5853(1997).

-i- function: Chemotactic factor that attracts lymistic factor of monocytes.
                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.

MEDLINE; 97166046.

ROSSI D.L. VICARI A.P., FRANZ.

J. IMMUNCL. 158:1033-1036(1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C-X-C) (CHEMOKINE CXC).
EMBL; U16752; G571508; -.
EMBL; L36033; G1220366; -.
PDB; 15DF; 28-JAN-98.
PDB; 25DF; 17-JUN-98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AND ACTIVATION-REGULATED CHEMOKINE) SCYA20 OR MIP3A OR LARC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -!- ALTERNATIVE PRODUCTS: TWO DIFFERENT FORMS
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CRUMP M.P., GONG J.H., ARENZANA-SEISDEDOS F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 96039262.
SHIROZU M., NAKANO T.,
SHINOHARA T., HONJO T.,
                                                                                                                                                                                 TISSUE-LIVER;
MEDLINE; 9719
                                                                                                                                                                                                                                          SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HOMO SAPIENS (HUMAN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBO J. 16:6996-7007(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLARK-LEWIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENOMICS 28:495-500(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        71 CIDPKLKWIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4
   SLIGHTLY, NEUTROPHILS, BUT NOT MONOCYTES.
TISSUE SPECIFICITY: EXPRESSED PREDOMINANTLY IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FUNCTION: CHEMOATTRACTANT ACTIVE ON T-LYMPHOCYTES, MONOCYTES, NOT NEUTROPHILS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PS00471; SMALL_CYTOKINES_CXC; FALSE_NEG; CHEMOTAXIS; GROWTH FACTOR; SIGNAL; ALT
                                                                                                                                                                              97190319.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INAZAWA
                                                                                                                                                                                                                                             PARTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ĭ,
                                                                                                                                                                                                                                                                                                                                      FRANZ-BACON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 67;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  POTENTIAL.
STROMAL CELL-DERIVED FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4B9911C7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ٠
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                                                                                                                                                                                                                                             SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RAJARATHNAM K., AN L., BAGGIOLINI M.,
                                                                                                                                                                                                                                                                                                                                      ⊼.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.57e-03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1;
                                                                                                                                                                                                                                                                                                                                          MCCLANAHAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TETRAPODA; MAMMALIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ALTERNATIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ALPHA AND BETA) ARE
                                                               LYMPHOCYTES AND,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MIP-3-ALPHA)
LARC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                 KUSUDA
                                                                                                                                                                                                                                                                                                                                      ∃.ĸ.,
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., SYKES B.D.,
                                                                                                                     SUDA J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SPLICING
                                                                                                                                                                                                                                                                                                                                          ZLOTNIK A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (LIVER
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REPORT OF STREET OF STREET
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N...
SEQUENCE FROM N...
MEDLINE; 87224164.
SCHMID J., WEISSMANN C.;
**MMTNOL. 139:250-256(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                  [3]
SEQUENCE FROM N.A.
MEDLINE; 89313739.
KOWALSKI J., DENHARDT D.T.;
KOWALSKI J., BIOL. 9:1946-1957(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-MAR-1989 (REL. 10, CREATED)
01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
01-MAR-1989 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
115-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
115-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
115-JUL-1998 (REL. 36, LAST ANNOTATION ENGINEED (NEUTROPHIL-
115-JUL-1998 (REL. 10, LAST SEQUENCE UPDATE)
115-JUL-1998 (REL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHAIN
DISULFID
DISULFID
SEQUENCE
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SEQUENCE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
                                                                                                 SEQUENCE OF 23-46.
MEDLINE; 89246368.
GOLDS E.E., MASON
                                                                                                                                                                                                                 SUBMITTED
                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MATSUSHIMA K., MORISHITA K., YOSH
LEW W., APPELLA E., KUNG H., LEON
J. EXP. MED. 167:1883-1893(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FACTOR) (NAF) (GRANULOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LL8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIGNAL
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                                                                            BIOCHEM.
                                                                                                                                                                                                                                                                                                                                              MUKAIDA N.,
                                                                                                                                                                                                                                                                                                                                                                         MEDLINE;
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                                                                                                                                                                                                                                            ISHIKAWA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        74 CANPKOTWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIMILARITY: BELONGS C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SAPIENS (HUMAN)
RYOTA; METAZOA; (
ERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CADPKQKWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        U77035; G1790925;
D86955; G1871139;
TE; PS00472; SMALL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
  OF 23-54.
89279141.
                                                                              J.
                                                                                                                                                                                                                                                                                                                                                                         89309826.
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                                                                                                                                                                                                              (JAN-1993)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPENDIX,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96
                                                                                                                                                                                                                                                                                                                SHIROO M., MATSUSHIMA
143:1366-1371(1989).
                                                                            MASON P., NYIRKOS
259:585-588(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27
32
33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ΑA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ٠
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IX, PBL, AND FETAL LUNG.
TIS, SMALL INTESTINE AND
LIPOPOLYSACCHARIDE (LPS)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SMALL_CYTOKINES_CC; 1.
XIS; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26
96
58
74
10762
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77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHORDATA;
                                                                                                                                                                                                            TO
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                                                                                                                                                                                                            EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHEMOTACTIC PROTEIN 1) (GCP-1) (EMOCTAKIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred.
1; N
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BY SIMILARITY.
DBAC0235 CRC32
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LEONARD E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MACROPHAGE
                                                                                                    ۳.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      67; DB 1;
No. 4.57e-03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFLAMMATORY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LAVU S., R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AND
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ۳.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KOBAYASHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REPRESSED
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALPHA
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SEQUENCE OF 28-99.
MEDLINE; 88162914.
GREGORY H., YOUNG
                                                                                                                                                                                                                                                              WARDHAME J., KADIELLE,
WILLEMS J., BILLING A.;
WILLEMS J., BILLING A.;
TAMMUNOL. 20:2113-2118(1990).
-i- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS.
-i- SUBUNIT: HOMODIMER.
-i- SUBUNIT: HOMODIMER.
-i- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
C-X-C) (CHMOKINE CXC).
EMBL; Y00787; G34519; -.
EMBL; M17017; G179580; -.
EMBL; M26383; G188628; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE; 90216714.
BALDWIN E.T., FRANKLI
WLODAWER A., WEBER I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 28-69.
MEDLINE; 88097462.
YOSHIMURA T., MATSUSHIMA K.,
OPPENHEIM J.J., LEONARD E.J.
                                                                                                                                                                        MEDLINE; 9117576
CLARK-LEWIS I.,
AEBERSOLD R.;
                                                                                                                                                                                                                                    N-TERMINAL FORMS.
MEDLINE; 89231715.
VAN DAMME J., VAN
                                                                                                                                                                                                                                                                                                                                                            BALDWIN E.T., WEBER I.T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUZUKI K., MIYASAKA H., MIZUNO S.;
                                                                                                         BAGGIOLINI M., CLARK-LEWIS FEBS LETT. 307:97-101(1992)
                                                                                                                                                                                                       SYNTHESIS OF
                                                                                                                                                                                                                                                                                                                                                                           X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS), MEDLINE; 91110556.
                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE; 91
CLORE G.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLORE G.M., APPELLA
BIOCHEMISTRY 29:1689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRUCTURE BY NMR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BIOCHEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BIOCHEM.
                                                                                                                               MEDLINE; 92347562.
                                                                                                                                           REVIEW
                                                                                                                                                               BIOCHEMISTRY
                                                                                                                                                                                                                                                                                                                          N-TERMINAL FORMS
                                                                                                                                                                                                                                                                                                                                             PROC. NATL.
                                                                                                                                                                                                                                                                                                                                                        YAMADA M., MATSUSHIMA K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                         X-RAY CRYSTALLOGRAPHY, AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE;
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DR EMBL; D14283; G219916; -.

PR PIR; S03975; S03975.

PR PIR; S04216; S04216.

PR PDB; 11L8; 15-JAN-91.

PDB; 31L8; 15-JAN-91.

PDB; 31L8; 15-OCT-95.

PDB; 11KM; 15-OCT-95.

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ROSSI D., HARDIMAN G., COPELAND N., GILBERT D.J

ZLOTNIK A., BAZAN J.F.;

SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA

EMBL; U92565; G2459677; -.

PFRAM; PF00048; 118; 1.
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EMBL; AF010586; G2317698; -.
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PFAM; PF00048; i18; 1.
SEQUENCE 395 AA; 42098 MW
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PAN Y., CLARE L., HONG Z., DOLICH S., DEEDS J., GONZALO GOSSELIN M., MA J., DUSSAULT B., WOOLF B., ALPERIN A., C GUTIERREZ-RAMOS J.C., GEARING D.; "Neurotactin, a membrane-anchored chemokine upregulated inflammation.";
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NARDELLI B., PIPPALLA V., GE
GENTZ R., GAROTTA G.;
J. EXP. MED. 0:0-0(0).
EMBL; U85766; G1916252; -.
PFAM; PF00048; I18; 1.
SEQUENCE 119 AA; 13119 MW
JLT 5
000585
000585;
01-JUL-1997
01-JUL-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                089093 P)
089093;
01-NOV-1998 ()
01-NOV-1998 ()
CC CHEMOKINE ;
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000175
000175;
01-JUL-1997
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LARC
                                                                                                                                                                                                                                                                                                                                                                                             VILLARES R.;
SUBMITTED (JUL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF053313; G3551819; -.
EMBL; AJ007862; E1312757; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "A novel rat CC chemokine, id display, is upregulated in br J. NEUROIMMUNOL. 0:0-0(1998).
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EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                SEQUENCE
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                                                                                                                                           75 CADPKQNWV 83
||||||:||
1 CADPKQKWV 9
                                                                                                                                                                                                                                                  Local Similarity
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Similarity 80.0%;
8; Conservative
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(TREMBLREL.)
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(TREMBLREL. 08, LAST SEQUENCE UPDATE)
(TREMBLREL. 08, LAST ANNOTATION UPDATE)
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  (TREMBLREL.
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larity 88.9%;
Conservative
                                                              PRELIMINARY;
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brain inflammation.";
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Pred. No.
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Pred. No. 5.65e-03;
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CC CHEMOKINE ST38
053405BD CRC32;
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THOTAKURA
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Q99664;
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01-MAY-1997 (TREMBLREL 0
01-NOV-1998 (TREMBLREL 0
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MEDLINE; 97275143.
HROMAS R., GRAY P.W., GELL G.I., TAKEDA J., &
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SUBMITTED (AUG-197) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U88320; G2196920; -.
EMBL; AF001979; G2624925; -.
EMBL; AF001979; G2624925; -.
EMBL; AF001048; i18; 1.
SEQUENCE 134 AA.
                                                                                                                                                                                                                "Cloning and characterization of exodusticon 89:3315-3322(1997).
EMBL: U64197: G1778717:
PROSITE: PS00472: SMALL_CYTOKINES_CC:
PFAM: PF00048: i18: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
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HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
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"Identification and characterization of containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
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SUBMITTED (JUN-1997)
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                                                                                                                                                                                                                                                                                                                                                 KLEMSZ M.J.;
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1 CADPKQKWVQ 10
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                                                                                          Local Similarity 77.8%, es 7; Conservative
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                                              CANPKOTWV 81
CADPKQKWV 9
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larity 80.0%;
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Pred. No. 3.77e-02;
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No. 2.36e-02
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BROXMEYER H.E.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P97884 PRELIMINARY; PAL,

1 P97884;

2 P97884;

3 P97884;

4 P97884;

5 P97884;

6 P1-MAY-1997 (TREMBLREL 03, CREATED)

1 P1-MAY-1997 (TREMBLREL 03, LAST SEQUENCE UPE

1 P1-NOV-1998 (TREMBLREL 08, LAST ANNOTATION UPE

2 CC CHEMOKINE EXODIS

5 CC CHEMOKINE EXODIS

5 CC CHEMOKINE EXODIS

6 EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAI

7 PPROGNAMMHI: MURIDAE; MURINAE; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
TISSUE-SPLEEN
ROSSI D.L., BAZAN J.F., ZIA
SUBMITTED (JUN-1997) TO EM
EMBL; AF006742; G2827882;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUN-1998 (TREMBLREL. 06, CREATED)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-JUN-1998 (TREMBLREL. 06, LAST ANNOTATION UPDATE)
01-JUN-1998 (TREMBLREL. 06, LAST ANNOTATION UPDATE)
LYMPHOTACTIN PRECURSOR.
LYMPHOTACTIN PRECURSOR.
GALLUS GALLUS (CHICKEN).
EUKARYCTA; METAZOA; CHORDATA; VERTEBRATA; ARCHOSAURIA; AVES;
NEDOGNATHAE; GALLIFORMES; PHASIANIDAE; PHASIANINAE; GALLUS.
P78423 PRELIMINARY;
P78423; 000672;
01-MAY-1997 (TREMBLREL, 03,
01-MAY-1997 (TREMBLREL, 03,
                                                                                                                                                                                                                                                                                                                                    SIGNAL
CHAIN
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    057411
057411;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIGNAL.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; AF053312; G3551817; -. PFAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "A novel rat CC chemokine, iddisplay, is upregulated in br. J. NEUROIMMUNOL. 0:0-0(1998).
EMBL: U90447; G1899246; ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-SPRAGUE-DAWLEY;
KELNER G.S., MACIEJEWSKI-LENOIR D., LEE E.
SUBMITTED (FEB-1997) TO EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                      SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
STRAIN-FISHER 344; TISSUE-BRAIN;
UTANS-SCHNEITZ U., LOREZ H., KLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LESSLAUER W.;
                                                                                                                                                                                   73 CVHPEQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         74 CADPKQIWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 CADPKQKWV 9
                                                                                                                                                            1 CADPKQKWVQ 10
                                                                                                                                                                                                                                          h 78.6%;
Similarity 70.0%;
7; Conservative
                                                                                                                                                                                                                                                                                                                                      97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96 AA;
                                                                                                                                                                                                                                                                                                                          1
25
AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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                                                                                                                                                                                                                                                                                                                                    24
97
11131
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88.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                ZLOTNIK A.;
EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                      Œ;
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brain infla
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Pred. No. :
0; Mismat
                                                                                                                                                                                                                                          Score 66; DB 13; Lo
Pred. No. 6.01e-02;
0; Mismatches 3;
    CREATED)
LAST SEQUENCE UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                    LYMPHOTACTIN. 3290101C CRC32;
                                                                                                                                                                                                                                                                                                                                                                               POTENTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KLINKERT
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                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             inflammation.
                                                                       397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 11;
3.77e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ьy
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CRC32;
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DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DA.SILVA J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
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                                                                                                                                                                                                                                                                                          97;
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(ESULT 10
ID Q14745
PRELIMINAKI,
AC Q14745;
AC Q14745;
UT 01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
D1 01-NOV-1996 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
D2 LD78 ALPHA BETA PRECURSOR (FRAGMENT).
OS HOMO SAPIENS (HUMAN).
PUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
FUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                                RESULPT RESULP
                                                                Query Match
Best Local Similarity
7; Conserv
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                                      밁
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Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.

ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J.,

BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.;

"Homo sapiens Chromosome 16 BAC clone CIT987SK-A-152E5.";

SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.

EMBL; U91835; G1899259; -.

EMBL; U84487; G1889523; -.

EMBL; U84487; G1888523; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BAZAN J.F., BACON K.B., HARDIMAN G., WANG W., GREAVES D.R., ZLOTNIK A., SCHALL T.J.;
"A new class of membrane-bound chemokine with NATURE 385:640-644(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1998 (TREMBLREL. CX3C CHEMOKINE PRECURSO
                                                                                                                                                                                                                            SIGNAL
                                                                                                                                                                                                                                                                       SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                       ISHIZUKA K., IGATA-YI
KATSURAGI S., KIN Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIGNAL
                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                           PFAM;
                                                                                                                                                                                                                                                                                                              PROSITE
                                                                                                                                                                                                                                                                                                                                                SUBMITTED (AUG-1995) TO EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                          MIYAKAWA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
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                                        67 CADPSEEWVQ 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 CADPKOKWV 9
CADPKQKWVQ 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHEMOKINE PRECURSOR.
                                                                                                                                                                                                                                                                                                                               D63785;
                                                                                                                                                                                                                                                                                        PF00048; il8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PF00048; il8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity 7; Conser
                                                                                                                                                                                                                                                                                                     3785; G961440; -. PS00472; SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1
25
397
                                                                                                                                                                   80
                                                                               76.2%;
larity 70.0%;
Conservative
                                                                                                                                                                                    17
80
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                                                                                                                                                              1
16
>80
80
8857 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24
397
42202
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77.8%;
                                                                                                                                                                                                                                                                                                                                                                                         OHMOTO Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LAST ANNOTATION UPDATE)
                                                                                 Pred.
                                                                                                Score 64; DB 4; Pred. No. 1.51e-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 66; DB 4; Lei
Pred. No. 6.01e-02;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           POTENTIAL.
CX3C CHEMOKINE.
C8093D7D CRC32;
                                                                                                                                                              3F87F1C6 CRC32;
                                                                                                                                                                                                       LD78 ALPHA BETA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERTEBRATA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                     K., NAKASHIMA H., OH
NOMIYAMA H., IIO M.,
                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                  DATA BANKS
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                                                                                 Ņ
                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 397;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CX3C
                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EUTHERIA; PRIMATES;
                                                                                                                     80;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         motif.";
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                                                                                                                                                                                                                                                                                                                                                                            MASON
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                                                                             Gaps
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RESULT RE
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Best Local Similarity
Matches 6; Conser
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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093238 PRELIMINARY;
093238;
01-NOV-1998 (TREMBLREL. 0
01-NOV-1998 (TREMBLREL. 0
01-NOV-1998 (TREMBLREL. CC CHEMOKINE-1.
                                                                                          JLT 13
9043646;
043646;
01-JUN-1998 (TREME
01-JUN-1998 (TREME
01-JUN-1998 (TREME
01-NOV-1998 (TREME
RANTES PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SHIMIZU T., SEIDL T., AND SIDERAS P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CYPRINUS CARPIO (COMMON CARP).

EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ACTINOPTERYGII; NEOPTER
TELEOSTEI; EUTELEOSTEI; OSTARIOPHYSI; CYPRINIFORMES; CYPRINOIDEA;
CYPRINIDAE; CYPRININAE; CYPRINUS.
             HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                     eotaxins.";
SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA
EMBL; AB010469; D1032417; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Activated murine B lymphocytes and CC chemokine which acts selectively J. EXP. MED. 188:451-463 (1998).
EMBL: AF052505; G3378116; -.
                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. FUJIKI K., NAKAO M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FUJIKI K., NAKAO M., SHIN D., YANO T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE;
                                                                                                                                                                                                                                                                                   74 CSDPKLRWV
|:||| :||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          76 CADPRQVWV
                                                                                                                                                                                                                                                                    \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 CADPKOKWV
                                                                                                                                                                                                                                                                    CADPKQKWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
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                                                                                                            (TREMBLREL.
(TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                      101
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                                                                                                                                                                                                                                                                                                                                         73.8%;
llarity 66.7%;
Conservative
                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                      AA,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10302 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               75.0%;
77.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                      11266 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E., SALLUSTO F.,
ANDERSSON J., M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98,8
                                                                                                              888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 63;
Pred. No.
1; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                       Score 62; DB 13;
Pred. No. 3.74e-01
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                              LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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                                   VERTEBRATA; MAMMALIA;
                                                                                                                                                                                         PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                    9CFBD540 CRC32;
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on activated T cells.";
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2.38e-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CRC32;
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MUS.
                                                                                                                                                                                                                                                                                                                                                                              Length 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                         BANKS
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                                                                                                                                                                                                                                                                                                                                             Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mammalian
                                   EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUTHERIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92
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   READ OCCURRENCE OCCURR
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Best Local Similarity
Matches 5; Conse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
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055038;
01-JUN-1998 (TREMBLREL 06, C)
01-JUN-1998 (TREMBLREL 08, L)
01-NOV-1998 (TREMBLREL 08, L)
                                                                                                                                                                                                                                                                                                             SULT 15
O15467; PRELIMINARY;
O15467;
O1-JAN-1998 (TREMBLREL. 05, C:
O1-JAN-1998 (TREMBLREL. 05, C:
O1-NOV-1998 (TREMBLREL. 08, L:
O1-INDUCIBLE CHEMOKINE.
                                                                                                                                                                               ILINCK OR SCYA16.
HOMO SAPERIS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B LYMPHOCYTE CHEMOATTRACTANT BLC.
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUBMITTED [2]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Burkitt's lymphoma receptor-1.";
NATURE 391:799-803(1998).
EMBL; AF044196; G2911374;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Structure of a region of 181 kb containing five CC (
SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS
EMBL; AF043341; G2905632; -.
EMBL; AF088219; G3719366; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GUNN M.D., NGO V.N., WILLIAMS L.T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL.
SEQUENCE FROM N.A
                                                        SEQUENCE FROM N.A.
HEDRICK J.A., HELMS A.,
SUBMITTED (NOV-1997) TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ž
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE; 98146056.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NOMIYAMA
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JANG J.S., KIM B.I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            75 CVNPRAKWLQ
| :|: ||:|
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73 CANPEKKWVR 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CADPKQKWVQ 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   109 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 91 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  71.4%;
larity 50.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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91
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                                                        GORMAN D., ZLOTNIK A.;
EMBL/GENBANK/DDBJ DATA BANKS
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                              LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 60; DB 11;
Pred. No. 9.12e-01;
3; Mismatches 2
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Pred. No. 9.12e-01
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                             CREATED)
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CF404FAD CRC32;
                                                                                                                                                                                                                    VERTEBRATA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BB6CCC22 CRC32;
                                                                                                                                                                                                                                                                                                                                                  ANNOTATION UPDATE)
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                                                                                                                                                                                                                    EUTHERIA; PRIMATES;
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Best Local S
Matches
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083516
083516;
01-NOV-1998
01-NOV-1998
01-NOV-1998
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MEDLINE; 98332770.

MEDLINE; 98332770.

PRASER C.M., NORRIS S.J., WEINSTOCK G.M., WHITE O., SUTTON G.G., COLAYTON R., KETCHUM K.A., CODSON R., GWINN M., HICKEY E.K., CLAYTON R., KETCHUM K.A., SOLDERGREN E., HARDHAM J.M., MCLEOD M.P., SALZBERG S., PETERSON J., SOLDERGREN E., HARDHAM D., HOWELL J.K., CHIDAMBARAM M., UTTERBACK T.

KHALAK H., RICHARDSON D., HOWELL J.K., CHIDAMBARAM M., UTTERBACK T.

MCDONALD L., ARTIACH P., BOWMAN C., COTTON M.D., FUJII C., GARLAND M.D., HORST K., ROBERTS K., WATTHEY L., WEIDMAN J., SMITH H.O.
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                     SUBMITTED (MAR-1998)
EMBL; AE001226; G3322
HYPOTHETICAL PROTEIN.
                                                                                                                              FRASER C.M., NORRIS S.J., WEINSTOCK G.M., WHITE O., SUTTON G.G., DODSON R., GWINN M., HICKEY E.K., CLAYTON R., KEECHUM K.A., SODERGREN E., HARDHAM J.M., MCLEOD M.P., SALZBERG S., PETERSON J., KHALAK H., RICHARDSON D., HOWELL J.K., CHIDAMBARAM M., UTTERBACK T. KHALAK H., RICHARDSON D., HOWELL J.K., CHIDAMBARAM M., UTTERBACK T. GARLANI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE-LIVER;
SHOUDAI K., HIESHIMA K.,
YOSHIE O., NOMIYAMA H.;
                                                                                             VENTER J.C.
                                                                                                                                                                                                                                                                                                                        "Complete Genome Spirochete.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BACTERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TREPONEMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HYPOTHETICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PFAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           monocyte chemoattractant human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. MEDLINE; 98308096.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Structure of a region of SUBMITTED (AUG-1998) TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BIOCHIM. BIOPHYS. ACTA 0:0-0(1998)
                                                                                                             HATCH B.,
                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                   SČIENCE 281:375-388(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BIOCHEM. BIOPHYS. RES. COMMUN. EMBL; U91746; G2581781; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Isolation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NOMIYAMA H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 CADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTNPNDDWVQ 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AB007454; D1024963; -. AF088219; G3719365; -. AF055467; G3395776; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŝ
                                                                                                                  HORST K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PALLIDUM.
SPIROCHAETALES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KWON B.S.; and characterization
  187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZHANG S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (TREMBLREL. 08, CREATED)
(TREMBLREL. 08, LAST SEQUENCE UPDATE)
(TREMBLREL. 08, LAST ANNOTATION UPDATE)
L 21.4 KD PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       70.2%;
llarity 50.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
  A
                                               G3322795;
                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                  ROBERTS K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13600 MW;
  21410
                                                                     TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BROXMEYER H.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of 181 kb containing five CC chemokine genes."; DEMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FUKUDA S.,
  , WM
                                                                                                                                                                                                                                                                                                                                                ę,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SPIROCHAETACEAE; TREPONEMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 59; DB 4; I
Pred. No. 1.41e+00;
4; Mismatches 1
                                                                                                                                                                                                                                                                                                                                              Treponema
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           on of LMC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A079DF66 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                247:217-222(1998).
  50303E26 CRC32;
                                                                                                                WATTHEY L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           f LMC, a novel lymphocyte and
chemokine, with myelosuppres
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OII
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         187
                                                                                                                                                                                                                                                                                                                                              pallidum,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      :
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                                                                                                                WEIDMAN J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MIURA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FRASER
                                                                                                                                                                                                                                                                                                                                              the Syphilis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
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                                                                                                             SMITH H.O.,
                                                                                                                                     GARLAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
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Query Match

70.28;

Score

59;

BB

2;

Length

187;

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RESULT 18
ID 009006;
AC 009006;
AC 009006;
AC 009006;
AC 01-JUL-1997 (TREMBLREL. 04, C]
DT 01-JUL-1998 (TREMBLREL. 07, L]
DT 01-NOV-1998 (TREMBLREL. 08, L]
DE BETA CHEMOKINE EXODUS-2.
GN SCYA21.
OS MUS MUSCULUS (MOUSE).
OC EUKARYOTA, METAZOA; CHORDATA;
OC EUKARYOTA, METAZOA; CHORDATA;
CT SUSCUENCE FROM N.A.
RC TISSUE-TOTAL FETUS;
RX MEDLINE; 97444139.
RA HOMAS R., KIM C.H., KLEMSZ M.
SCHUZLELIN-BICK C., BROXMEYER
RA SCHUZLELIN-BICK C., BROXMEYER
RA SCHUZLELIN-BICK C., BROXMEYER
RA SCHUZLELIN-BICK C., BROXMEYER
RI "ISOLATION and Characterizatic
RT with a unique 37-amino acid co
RL J. IMMUNOL. 159:2554-2558(199)
RP SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PESULT 17
PESULT 17
PESULT 009002;
AC 009002;
DT 01-UL-
DT 01-UL-
DT 01-VOV-
DE SMALL I
GN SCYAALL
OS MUS MUS
OC EUKARYO
OC SCIUROG
RN [1]
RP SEQUENC
RA TANABE
RA COLLINS
KL SUBMITT
RN [2]
RP SEQUENC
RX MEDLINE
RA HEDRICA
RT "Identi
RI J. IMMI
RI CONTABLE
RA HEDRICA
RT "Identi
RI J. IMMI
RI CONTABLE
RA HEDRICA
RT SEQUENC
RA HEDRICA
RT SEMBL; 1
DR MEDL; 2
DR MEDL; 1
DR MEDL; 2
DR MEDL; 1
DR MEDL; 2
DR MEDL; 1
DR MEDL; 2
DR MEDL; 2
DR MEDL; 3
DR MEDL; 3
DR MEDL; 4
DR MED
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 63.6%; Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUL-1997
01-JUL-1997
01-NOV-1998
                                                     TISSUE-TOTAL FETUS;
MEDLINE; 97444139.
HROMAS R., KIM C.H., KLEMSZ M., KRATHWOHL M.,
SCHNIZLEIN-BICK C., BROXMEYER H.E.;
"Isolation and characterization of Exodus-2, a
"Isolation and characterization of Exodus-2, a
with a unique 37-amino acid carboxyl-terminal
J. IMMUNOL. 159:2554-2558(1997).
                                                                                                                                                                                                                                                                                                    MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VI
SCIUROGNATHI; MURIDAE; MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HEDRICK J.A., ZLOTNIK A.;
SUBMITTED (MAY-1997) TO EMBL,
EMBL; AF001980; GZ0209189; -.
EMBL; AF001980; GZ024927; -.
EMBL; MGI:1097677; SCYA21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.

MEDLINE; 974,00322.

HEDRICK J.A., ZLOTNIK A.;

"Identification and characterization containing six conserved cysteines,";

IMMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE-THYMUS;

TANABE S., LU Z., LUO Y., QUACKENBUSH E.J., BERMAN M.A.,

COLLINS-RACIE L.A., MI S., REILLY C., LO D., JACOBS K.A.,

SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SCYA21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SMALL INDUCIBLE CYTOKINE A21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    009002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 75 CANPEEGWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ы
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PF00048; i18; NCE 133 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   h 69.0%;
Similarity 60.0%;
6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TREMBLREL. 04, CREATED)
(TREMBLREL. 04, LAST SEQUENCE UP)
(TREMBLREL. 08, LAST ANNOTATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14558 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                        CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 58;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. 1.41e+00;
3; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (TCA4).
                                                                                                                                                                                                                                                                                                                             VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C0532523 CRC32;
                                                                                                                                                                                                                                                                                                          MUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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atches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ø
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                                                                                                                                                                                                                                                                                                                          MAMMALIA; EUTHERIA; RODENTIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             novel beta chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MAMMALIA;
                                                                                                          œ
                                                                                                                                                                FIFE
                                                                                    novel C-C
extension.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 133;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
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                                                                                                                                                                K., COOPER S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EUTHERIA;
                                                                                                                chemokine
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RESULT
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Best Local S
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Matches
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MEDLINE; 97094384.

MOORE P.S., BASHOFF C., WEISS

"MOlecular mimicry of human c
genes by KSHV.";

SCIENCE 274:1739-1744(1996).
[2]
                                                                                                                                                                                                                                       JLT 20
Q98158 PREL
Q98158; Q12569;
Q1-FEB-1997 (TRE
01-JUL-1997 (TRE
01-NOV-1998 (TRE
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01-NOV-1998
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084834;
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DAVIS R.W.;
SUBMITTED (MAY-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
SEMBL; AE001355; G3329297; -.
SEQUENCE 1053 AA; 120168 MW; 781C1449 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U88322; G3165697; -.
MGD; MGI:1097677; SCYA21.
PFAM; PF00048; 118; 1.
SEQUENCE 133 AA; 14600 MW; B34A5E22 CRC32;
                                                                                                                                                           KAPOSI'S SARCOMA-ASSOCIATED HERPESVIRUS. VIRUSES; DSDNA VIRUSES, NO RNA STAGE; HE GAMMAHERPESVIRINAE; RHADINOVIRUS.
                                                                                                                                                                                                                         ORF K6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN-D/UW-3/CX;
STEPHENS R.S., KALMAN S., LAMMEL C.J., FAN J., MARATHE R.,
MITCHELL W.P., OLINGER L., TATUSOV R.L., ZHAO Q., KOONIN E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Genome Sequence of an Chlamydia trachomatis."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STEPHENS R.S., KALMAN S MITCHELL W.P., OLINGER DAVIS R.W.;
                                                                                                                        SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BACTERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHLAMYDIA TRACHOMATIS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                            954 CASRRQKWID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             y Match 69.0%;
Local Similarity 50.0%;
les 5; Conservative
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mes 6; Conser
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7 (TREMBLREL.
8 (TREMBLREL.
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(TREMBLREL.)
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08, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
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                                                                                WEISS
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                                                            SS R.A., C
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Pred. No.
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Pred. No.
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Mismatches 2
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                                                            response pathway
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Best Local S
Matches
     Query Match 67.9%;
Best Local Similarity 60.0%;
Matches 6; Conservative
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SUN R., LIN S.-F., MILLER G.

SUBMITTED (SEP-1996) TO EMBL

EMBL; U75698; G1718266; -

EMBL; U74585; G1658273; -

EMBL; U74585; G1658273; -

EMBL; U71366; G2246546; -

EMBL; U71366; G3551763; -

EMBL; U71366; G3551763; -

EMBL; U71366; G3551763; -

EMBL; U71366; G7501763; -

EMBL; U71566; -

EMBL; U71366; G7501763; -

EMBL; U71366; G7501763; -

EMBL; U71366; G7501763; -

EMBL; U71566; G7501763; -

EMBL; U71566; -

EMBL
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MEDLINE; 97121480.
RUSSO J.J. BOHENZKY R.A., C
PARRY J.P., PERUZZI D., EDEL
"Nucleotide sequence of the
(HHV8)."
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062812;
062812;
01-AUG-1998
01-AUG-1998
01-AUG-1998
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                                                                                                             EMBL; AFO NON_TER SEQUENCE
                                                                                                                                                                                            FRANCHINI M.;
SUBMITTED (API
                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
TISSUE-BRONCHOALVEOLAR TISSUE;
                                                                                                                                                                                                                                                                                                                     EQUUS CABALLUS (HORSE).
EUKARYOTA; METAZOA; CHORDATA;
PERISSODACTYLA; EQUIDAE; EQUU
                                                                                                                                                                                                                                                                                                                                                                                                                                     01-AUG-1998 (TREMBLREL.
01-AUG-1998 (TREMBLREL.
01-AUG-1998 (TREMBLREL.
INTERLEUKIN-8 (FRAGMENT)
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"Cell-homologous genes in the Kaposi's sarcoma-associated human herpesvirus 8: determinants of its pathogenicity?";
J. VIROL. 71:4187-4192(1997).
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HENDRICKSON S., GUO H.G., HAYWARD G.S., RI
SUBMITTED (NOV-1996) TO EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. NICHOLAS J., RUVOI
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PARRY J.P.,
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                                                                                                                                      TTED (APR-1998) TO EMBL/GENBANK/DDBJ
AF062377; G3126973; -.
ER 97 97
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ., BOHENZKY R.A.,
., PERUZZI D., ED
(OCT-1996) TO EM
                                                                                                                97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
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                                                                                                                AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                        (FRAGMENT).
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                                                                                                          10742 MW;
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07,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ER G.;
EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A., CHIEN M.C., CHEN J., EDELMAN I.S., CHANG Y., EMBL/GENBANK/DDBJ DATA E
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                                                                                                                                                                                                                                                                                                                                EQUUS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              CREATED)
LAST SEQ
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Pred. No.
2; Misma
  Score 57; DB 6; I
Pred. No. 3.36e+00;
1; Mismatches 3
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                                                                                                                                                                                                                                                                                                                                                         VERTEBRATA;
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. No. 3.36e+00;
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BANKS.
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.S.;
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RESULT 22

ID 023536 PRELIMINARY; PRI;

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DT 01-JAN-1998 (TREMBLREL. 05, CREATED)
DT 01-AN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
DT 01-AUG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
DE RESISTANCE GENE HOMOLOG.
OS ARABIDOPSIS THALIANA (MOUSE-EAR CRESS).
OC EUKARYOTA; VIRIDIPLANTAE; CHAROPHYTA/EMBRYOPHYTA GROUP; EMBRYOPHYTA;
CTRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA;
OC TRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA;
TERRYN N.,
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Best Local S
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EMBL; U97106; G2109275; -.
EMBL; U97106; G2109275; -.
PPAM; PF00931; NB-ARC; 1.
PFAM; PF00931; NB-ARC; 1.
SEQUENCE 1361 AA; 154366 M
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004264;
01-JUL-1997
01-JUL-1997
01-NOV-1998
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ARABIOOPSIS THALIANA (MOUSE-EAR-CRESS).
EUKARYOTA; VIRIDIPLANTAE; CHAROPHYTA/EMBRYOPHYTA GROUP; EMBRYOPHYTA;
TRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA;
EUDICOTYLEDONS; ROSIDAE; CAPPARALES; BRASSICACEAE; ARABIDOPSIS.
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01-JUL-1997 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
DOWNY MILDEW RESISTANCE
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SUBMITTED (JUN-1997) TO EM
EMBL; Z97342; E327026; -.
SEQUENCE 192 AA; 21535
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                                                                                                                                   Similarity 6; Conser
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larity 66.7%;
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. 04, LAST SEQUENCE UPD
. 08, LAST ANNOTATION UPPROTEIN RPP5.
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EMBL/GENBANK/DDBJ DATA BANKS
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. 3.36e+00;
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043927; PRELIMINARY;

043927; (TREMBLREL. 0

01-JUN-1998 (TREMBLREL. 0

01-NOV-1998 (TREMBLREL. 0
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STRAIN-SALVADOR I;
ROSENTHAL P.J.;
SUBMITTED (MAR-1998) TO EMB
EMBL; AF052747; G2970697; -
NON_TER 1
                                                                                                                                                                                                                                   CHAIN
SEQUENCE
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"A B-cell-homing chemokine made in Burkitt's lymphoma receptor-1.";
NATURE 391:799-803(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CXC CI
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01-AUG-1998 (TREMBLREL 07,
01-AUG-1998 (TREMBLREL 07,
01-AUG-1998 (TREMBLREL 07,
                                                                                                                                                                                                                                                                                                                                         NAPOLITANO M., SPINETTI G., GAETANO C., CAPOGROSSI C.M.; SUBMITED (OCT-1997) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; AJ002211; E1249325; -. EMBL; AF0444197; G2911376; -. EMBL; AF029894; G3169814; -.
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BAGGIOLINI M., MOSER B.;
"B cell-attracting chemokine 1,"
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RYOTA; METAZOA; CHORDATA;
  CADPKQKWVQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APICOMPLEXA; HAEMOSPORIDA; PLASMODIUM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OMOH
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                                                                                                                                                                                                                                   Œ;
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LAST SEQUENCE LAST ANNOTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STUBER
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Pred.
4; M
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                      Score 55; DB 4; 1
Pred. No. 7.84e+00;
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                                                                                                                                                                                                                             POTENTIAL.
POTENTIAL.
1; BE5A46BC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B1E4CEB2 CRC32;
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d. No. 5.15e+00;
Mismatches 1;
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ANNOTATION UPDATE)
                                                                                                              Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           lymphoid
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                                                                                                                                                                                                                                   CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           follicles activates
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nphocytes via BLR1/CXCR5.";
                                                                                                                                                                    Length 109;
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                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
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                                                                                                           Gaps
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ID 065737;
AC 065737;
AC 065737;
AC 065737;
DT 01-AUG-1998 (TREMBLREL 07, CREATED)
DT 01-AUG-1998 (TREMBLREL 07, LAST SEQUENCE UPDATE)
DT 01-AUG-1998 (TREMBLREL 07, LAST ANNOTATION UPDATE)
DT 01-AUG-1998 (TREMBLREL 07, LAST ANNOTATION UPDATE)
DE BETA-GALACTOSIDASE (EC 3.2.1.23) (LACTASE) (FRAGMENT).

CICER ARIETINUM (CHICKPEA) (GARBANZO).
CICER ARIETINUM (CHICKPEA) (GARBANZO)
CHARNOTA; VIRIDLPLANTAE; CHARNOTATA; MAGNOLLOPHYTA;
COC TRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA GROPLOPHYTA;
COC TRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA;
COC TRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA; CHICKPEA; MAGNOLLOPHYTA;
COC TRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA; CHICKPEA; CICI
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                                                    Query Match
Best Local s
Matches
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Best Local S
Matches
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1974671;
101-FEB-1997 (TREMBLREL. 02, CREATED)
101-FEB-1997 (TREMBLREL. 02, LAST SEQUENCE UPDATE)
101-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDAT HYPOTHETICAL 16.6 KD PROTEIN.

SYNECHOCYSTIS SP. (STRAIN PCC 6803).
                                                                                                                                                                                                                               STRAIN-CV. CASTELLANA; TISSUE-ETIOLATED EPICOTYLS; ESTEBAN R., DOPICO B., LABRADOR E.; SUBMITTED (APR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.-I-CATALYTIC ACTIVITY: HYDROLYSIS OF TERMINAL, NON-F BETA-D-GALACTOSE RESIDUES IN BETA-D-GALACTOSIDES. EMBL; AJ005043; E1285876; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Sequence analysis of the genome of the unicellular cyanobacterium Synechocystis sp. strain PCC6803. II. Sequence determination of the centire genome and assignment of potential protein-coding regions."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KANEKO I., SATO S., KOTANI H., TANAKA A., ASAMIZU E., NAKAMURA Y., MIYAJIMA N., HIROSAWA M., SUGJURA M., SASAMOTO S., KIUURA T., HOSOUCHI I., MATSUNO A., MURAKI A., NAKAZAKI N., NARUO K., OKUMURA SHIMPO S., TAKEUCHI C., WADA T., WATANABE A., YAMADA M., YASUDA M., TABATA S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA RES. 3:109-136(1996).
EMBL; D90917; D1019522; -.
HYPOTHETICAL PROTEIN.
SEQUENCE 145 AA; 16561 P
                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                            NON_TER
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KANEKO T., SATO S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A. STRAIN-PCC6803;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUBMITTED (JUN-1996)
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266 CGQPTQKW 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60 PRQRWVQ
|:|:|:|
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
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                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                             307 AA;
                                                    65.5%;
larity 62.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            66
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                                                                                                                                                                          33486 MW;
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                                                 Score 55; DI
Pred. No. 7.8
2; Mismatch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 55; DB 2;
Pred. No. 7.84e-
2; Mismatches
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                                                                                                                                                                          BlEA5B7D CRC32;
                                                          Mismatches
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                                                                                   DB 10;
7.84e+00;
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7.84e+00;
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                                                                                                               Length
                                                                                                                                                                                                                                                                                                                            NON-REDUCING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBRYOPHYTA;
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                                                    Gaps
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CADPKQKW 8

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RESULT 29
ID Q51136
Q51136
PRELIMINARY; PRT; 172 AA.
AC Q513136
DT 01-NOV-1996 (TREMBLREL. 01, CREATED)
DT 01-NOV-1998 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
DT 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
DT 01-NOV-1998 (TREMBLREL)
OS NEISSERIA MENINGTIDIS
OC BACTERIA; PROTEOBACTERIA; BETA SUBDIVISION; NEISSERIACE
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN-M1080;
RX MEDLINE; 96326323.
RA ERWIN A.L., GOTSCHLICH E.C.;
RT (L-DH); evidence for a second meningococcal L-LDH with
RT regulation.";
RI J. BACTERIO. 178:4807-4813(1996).
DR EMBL; U58911; G1381738; -.
FT NON_TER 1
1
SQ SEQUENCE 172 AA; 19765 MW; 85C8B90D CRC32;
      RESULT
ID Q6
AC Q6
DT 01
DT 01
DT 01
DT 01
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Best Local Similarity 100.0%;
Matches 6; Conservative
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Best Local
JULT 30
Q67634;
Q67634;
Q67634;
Q1-NOV-1996 (TREMBLREL. 01, CI)
Q1-NOV-1996 (TREMBLREL. 01, LI)
Q1-NOV-1998 (TREMBLREL. 08, LL)
Q1-NOV-1998 (TREMBLREL. 08, LL)
Q1-NOV-1998 (TREMBLREL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       065736;
01-AUG-1998
01-NOV-1998
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ESTEBAN R., DOPICO B., LABRADOR E.;
SUBMITTED (SEP-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- CATALYTIC ACTIVITY: HYDROLYSIS OF TERMINAL, NON-REDUCING BETA-D-GALACTOSE RESIDUES IN BETA-D-GALACTOSIDES.
-!- SIMILARITY: BELONGS TO FAMILY 35 OF GLYCOSYL HYDROLASES.
EMBL; AJ005042: E1321550; -.
EMBL; AJ005042: GLYCOSYL_HYDROL_F35; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CICER ARIETINUM (CHICKPEA) (GARBANZO).

EUKARYOTA; VIRIDIPLANTAE; CHAROPHYTA/EMBRYOPHYTA GROUP; EMBRYOPHYTA;
TRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA;
EUDICOTYLEDONS; ROSIDAE; FABALES; FABACEAE; PAPILIONOIDEAE; CICER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LT 28
065736
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01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
BETA-GALACTOSIDASE (EC 3.2.1.23) (LACTASE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ERWIN A.L., GOTSCHLICH E.C.;
"Cloning of a Neisseria meningitidis gene for L-lactate dehydrogenase (L-LDH): evidence for a second meningococcal L-LDH with different
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BACTERIA; PROTEOBACTERIA; BETA SUBDIVISION; NEISSERIACEAE; NEISSERIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
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ACT_SITE 187 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                           3 PKQKWV
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MEDLINE; 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GALLID HERPESVIRUS TYPE 1.
VIRUSES; DSDNA VIRUSES, NO RNA STAGE; HERPESVIRIDAE;
ALPHAHERPESVIRINAE; VARICELLOVIRUS.
                                                                                                                                                                                                                                                                                                                               SEQUENCE
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CADPKQKWVQ
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ZENG M., BHUIYAN Z.A., UBUKATA E.,
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llarity 60.0%;
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S Disclosure; Page 5; 27pp; English.

CC The present sequence represents an analogue, MCP-1 (10-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the CC N-terminal amino acids 1-9 of MCP-1, acts as an antagonist of MCP-1 CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 CC receptor. The analogue is useful as an anti-inflammatory agent to block CC the effects of MCP-1 which is an inflammatory mediator causing migration CC of monocytes and other cells e.g. basophils and lymphocytes into CC inflammatory diseases MCP-1 has been implicated in allergic and chronic CC diseases. The analogue competes more effectively with MCP-1 for binding CC diseases. The analogue competes more effectively with MCP-1 for binding CC providing 50% inhibition of binding at a 25:1 ratio or less, compared CC with 75:1 for prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared Sequence 66 AA;
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19-JUN-1995; 152141.
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W13599;
07-NOV-1997 (first entry)
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                                                                                                                                Homo sapiens.
                                                                                                                                                                           chronic inflammatory disease;
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CC The present sequence represents an analogue, MCP-1 (11-76), of monocyte CC chemoattractant protein-1 (MCP-1). The analogue, which lacks the CC N-terminal amino acids 1-10 of MCP-1, acts as an antagonist of MCP-1 CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 CC receptor. The analogue is useful as an anti-inflammatory agent to block CC the effects of MCP-1 which is an inflammatory mediator causing migration CC of monocytes and other cells e.g. basophils and lymphocytes into CC inflammation sites. MCP-1 has been implicated in allergic and chronic CC inflammatory diseases e.g. arthritis, arteriosclerosis and several lung CC diseases. The analogue competes more effectively with MCP-1 for binding CC MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared SQ Sequence 67 AA;
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                                                                                                                                                                vaccines against meaning NB: Identified by matching commence 67 AA;
                                                                                                                                                                                                                                                                                 detecting and preventing meningitis

Claim 47; Fig 8/10; 89pp; English.

R73915 is the chemokine Human monocyte chemoattractant factor hMCP-3.

It contains the meningitis related antigenic sequences (MRHAS) claimed in R73896 and R73908, which are recognised by a monoclonal antibody from the hybridoma Rubella virus (RV)-1. The claimed MRHAS peptides may be used in immunoassays to diagnose the presence of bacterial and/or viral meningitis agents in a sample, or in prophylactic and therapeutic meningitis treatments. The peptides may also be used as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SHAR/) SHARMA L R.
(VALS/) VAN ALSTYNE D.
Sharma LR, Van Alstyne D;
WPI; 95-14/431/19.
New peptide(s) and corresp. antibodies for the treatment of meningitis - the peptide(s) corresp. to homologous antigenic sites on bacterial and viral agents and on chemokine(s), used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human monocyte chemoattractant factor hMCP-3: Chemokine; vaccine; Human monocyte chemoattractant factor; hMCP-3; chemokine; vaccine; meningitis related homologous antigenic sequence; MRHAS; RV-1;
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28-SEP-1993; US-127499.
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                                                                                                                                                                                                                        corresponding MRHAS peptides
                                                            Score 44; DB 14;
Pred. No. 8.87e+01;
0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 44; DB 24;
Pred. No. 8.87e+01;
0; Mismatches 0
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Best Local
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lacks MCP-1 accellagent anti-inflammatory agent claim 7; Page 5; 27pp; English.

The present sequence represents an analogue, MCP-1 (9-76), of monocycchemoattractant protein-1 (MCP-1). The analogue, which lacks the N-terminal amino acids 1-8 of MCP-1 acts as an antagonist of MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 which is an inflammatory mediator causing migration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present sequence represents a chemokine, CKbeta-13, which is capable of mobilising stem cells. The chemokine can be used therapeutically to improve stem cell mobilisation, optionally together with a colony stimulating factor or other haematoregulatory agent. It can be used wherever an increased level of haematopoietic cells is needed, e.g. to increase the immune response to chronic infection (particularly bacterial or parasitic), to promote wound healing, in (transplant) patients with reduced bone marrow function as a result of immunosuppressive treatment or disease, and to provide more rapid diseases. The induced stem cells may be harvested for subsequent return to the patient, optionally after they have been genetically manipulated
                                                                                                                                                                                                                                                                                                                                                                              Gong J, Lewis i, WPI; 97-165844/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Monocyte chemoattractant protein analogue MCP-1 (9-76). Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 W13597 standard; peptide; 68 AA. W13597; 07-NOV-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SMIK) SMITHKLINE BEECHAM CORP. Kreider BL, Li H, Pelus L, WI WPI; 97-258956/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAY-1997.
23-OCT-1996; U16959.
24-OCT-1995; US-006051.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Stem cell mobilising chemokine CKbeta-13.

Stem cell mobilising chemokine CKbeta-13.

Haematopoietic cell; parasitic infection; colony stimulating factor haematoregulator; immune response; bacterial infection; transplant; wound healing; bone marrow; immunosuppression; regeneration;
                                                                                                                                                                                                                                                                                                                       N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) lacks MCP-1 activity and inhibits receptor binding, useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-DEC-1996.
19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     to deliver a selected gene product (gene therapy). The cells may be co-administered with a cytotoxic drug.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               increased levels of haematopoietic cells increase resistance to infection Claim 10; Page 13; 24pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             neoplastic disease; viral disease; gene therapy; cytotoxic drug.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 lung disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           h 100.0%;
Similarity 100.0%;
6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 44; D. Pred. No. 8. 0; Mismatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         White JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  drug.
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lls are required, e.g. to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 24;
8.87e+01;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 68
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Macrophage derived chemokine (MDC) and analogues - used in the treatment of inflammatory diseases, MDC antibodies used to treat PT Crohn's disease, rheumatoid arthritis, etc.

PS Claim 25; Page 84; 106pp; English.

CA new macrophage derived chemokine, MDC, a member of the C-C

CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's

CC analogues may be used in the treatment of inflammatory diseases

CC especially diseases characterised by monocyte chemotaxis towards a

CS site of inflammation. MDC and it's analogues also induce fibroblast

CC proliferation having a positive effect in wound healing and

CC angiogenesis. They may prove to be clinically important in the

CC treatment of tumours, by directly or indirectly inhibiting tumour

CC condation. Antibodies directed against MDC and its analogues may be

CC used in the treatment of Crohn's disease, rheumatoid arthritis and

CC atheroscierosis. Probes and/or primers for the identification of MDC

CC encoding sequences can be derived from MDC encoding sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 6; Conservative
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Sequence 68 AA;
                                                                                                                             angioplasty
                                                                                                                                             des(2-8) MCP-1.
monocyte chemoattractant protein; MCP-1; mutant; restenosis;
                                                                                                                                                                                                                                                          R87678;
                                                                                                                                                                                                                                                                                 R87678 standard; protein;
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07-JUN-1996; U10114.
07-JUN-1995; US-479620.
16-NOV-1995; US-558658
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MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease; rheumatoid arthritis; chemotaxis; fibroblast proliferation; wound healing; angiogenesis; inflammation.
                                                                                            Homo sapiens
                                                                                                                                                                                                                            21-FEB-1996
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                                modified_site
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Similarity 100.0%;
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                                Location/Qualifiers 2..3
   /note-
   "amino acids
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Pred. No. 8.87e+01;
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Pred. No. 8.87e+01;
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      2-8
of the native protein
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Trohn's disease, rheumatoid arthritis, etc.

PS Claim 25; Page 84; 106pp; English.

A new macrophage derived chemokine, MDC, a member of the C-C

(Cys-Cys) subfamily of cytokines has been isolated. MDC and it's concluded may be used in the treatment of inflammatory diseases analogues may be used in the treatment of inflammatory diseases considered in the conclude a positive effect in wound healing and consideration having a positive effect in wound healing and consideration. Mnc and it's analogues also induce fibroblast consideration. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour consideration. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes and/or primers for the identification of MDC analogues may be according sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are proceed to prove the monocyte chemo-attractant activity of procedure of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis.

Chaim 4; Page 11; 22pp; English.

Choocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 24 Arg by Phe; (3) substitution of 3-Arg by Ala; and/or (4) deletion of amino cacids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Blology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1999.

The peptides can be used to prevent restenosis, e.g. in patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
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07-JUN-1996; U10114.
07-JUN-1995; US-479620.
16-NOV-1995; US-558658.
(ICOS-) ICOS CORP.
Godiska R. Gray PW;
WPI; 97-052324/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   disulfide_bond 4..29
disulfide_bond 5..45
W09513295-A1.
18-MAY-1995.
07-NOV-1994; U12874.
12-NOV-1993; US-152301.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human macrophage derived chemokine analogue.
MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease; rheumatoid arthritis; chemotaxis; fibroblast proliferation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
WO9640923-Al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W20061 standard; Protein;
W20061;
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                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         wound healing; angiogenesis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (DAND ) DANA FARBER CANCER INST
                                                                                                                                   encoding
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Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             43 eicadp 48
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| EICADP 6
                                                                                                    sequences can be derived 69 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 44; DB 14;
Pred. No. 8.87e+01;
0; Mismatches 0
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                                                                                                                            encoding sequences
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Score Pred.

No. 44

DB 23; 8.87e+01;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PT anti-inflammatory agent
PS Claim 5; Page 5; 27pp; English.
PS Claim 5; Page 5; 27pp; English.
CC The present sequence represents an analogue, MCP-1 (8-76), of monocyte
CC Chemoattractant protein-1 (MCP-1). The analogue, which lacks the
CC N-terminal amino acids 1-7 of MCP-1, acts as an antagonist of MCP-1
CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1
CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1
CC receptor. The analogue is useful as an anti-inflammatory agent to block
CC the effects of MCP-1 which is an inflammatory mediator causing migration
CC of monocytes and other cells e.g. basophils and lymphocytes into
CC inflammation sites. MCP-1 has been implicated in allergic and chronic
CC inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
CC diseases. The analogue competes more effectively with MCP-1 for binding
CC MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably
CC providing 50% inhibition of binding at a 25:1 ratio or less, compared
CC with 75:1 for prior art mutant 7ND.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 6; Conservative
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                                                                                                                                                   19-DEC-1996: U10114.
07-JUN-1996; U10114.
07-JUN-1995; US-479620.
16-NOV-1995; US-558658.
(ICOS-) ICOS CORP.
Godiska R, Gray PW;
                                                                                                                                                                                                                                                                                                                                       wound healing; a Synthetic. W09640923-A1.
WPI; 97-052324/05.

Macrophage derived chemokine (MDC) and analogues - treatment of inflammatory diseases, MDC antibodies Crohn's disease, rheumatold arthritis, etc. Claim 25; Page 83; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                     Human macrophage derived chemokine analogue.
MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease; rheumatoid arthritis; chemotaxis; fibroblast proliferation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gong J, Lewis 1, WPI; 97-165844/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wonocyte chemoattractant protein analogue MCP-1 (8-76). Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W13596 standard; peptide; 69 W13596;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W20060;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N-terminally truncated monocyte chemo:attractant protein-1 lacks MCP-1 activity and inhibits receptor binding, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-DEC-1996.
19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
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Pred. No. 8.87e+01;
racmatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                     inflammation.
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                                                                                                                                                                                                        Query Match
Best Local
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Droll+ variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10. Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psociasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or treat rheumatoid arthritis, autoimmune, chronic inflammatory or treat the material force and the control of the contro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A new macrophage derived chemokine, MDC, a member of the C-C (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's analogues may be used in the treatment of inflammatory diseases especially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and it's analogues also induce fibroblast proliferation having a positive effect in wound healing and angiogenesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes and/or primers for the identification of MDC encoding sequences can be derived from MDC encoding sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Drol3+ chemokine betal0 or monocyte chemotactic protein 4 variant. Human; chemokine betal0; Ck betal0; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4;
                                                                                                                                                                                                                                                                                                                       infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck beta10 cDNA can be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    asthma and fibrosis
Example 11; Fig 5; 83pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Polypeptide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 97-435153/40
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23-FEB-1996; WO-U02598.
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28-AUG-1997.
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                                                                                                                                                                                                    Match 100.0%;
Local Similarity 100.0%;
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Local Similarity 100.0%;
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EICADP 6
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Pred.
0; M
                                                                                                                                                                                                Score 44; DB 27;
Pred. No. 8.87e+01;
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3. No. 8.87e+01;

---+ches 0; Indels
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Example 11; F19 5; 83pp; English.

CC monocyte chemotactic protein 4 (MCP 4) Bac 3 variant, which can be CC used to treat patients deficient in Ck beta10, while a Ck beta10 CC antagonist can be used to reduce excessive levels of Ck beta10. Ck CC beta10 can be used to treat leukaemia, solid tumours, chronic or CC opportunistic infections, autoimmune diseases, asthma, fibrotic CC diseases, psoriasis and neurodegenerative diseases. It also compounds for labelled Ck beta10 can be used to identify its cognate CC enceptor, while cells expressing the receptor can be used to screen CC compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or compounds for (ant)agonist activity. The antagonist can be used to screen CC compounds for (ant)agonist activity. The antagonist can be used to screen CC compounds for (ant)agonist activity. The antagonist can be used to screen CC compounds for (ant)agonist activity. The antagonist can be used to screen CC compounds for labelled ck beta10 can be used to screen CC compounds for labelled ck beta10 can be used to isolate genes encoding similar peptides, in gene therapy CC control of the compounds for can be used to isolate genes encoding similar peptides, in gene therapy CC control of the compounds identification.
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Best Local
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   18-MAY-1995.
07-NOV-1994; I
12-NOV-1993; I
(DAND ) DANA I
ROllins B, Z
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13
R87677 standard; protein; 76
R87677;
                                                                                                                                                                             disulfide_bond disulfide_bond
                                                                                                                                                                                                                                                                                                                                                           angioplasty.
                                                                                                                                                                                                                                                                                                                                                                                          monocyte chemoattractant protein; MCP-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Adams M, Alderson R, Parmelee D, White J; WPI; 97-435153/40.
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                                                                                                                                                 W09513295-A1.
                                                                                                                                                                                                                                                                       modified_site
                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                            (3-Ala) MCP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                              21-FEB-1996 (first entry)
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Similarity 100.0%;
6; Conservative
1994; U12874.
1993; US-152301.
DANA FARBER CANCER INST
B, Zhang YJ;
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11..36
12..52
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                                                                                                                                                                                                                                  "Asp
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Pred. No. 8.1
0; Mismatcl
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3.87e+01;
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PD 13-SEP-1994; J01512.

PR 13-SEP-1993; JP-227385.

PR (TORA) TORAY IND INC.

PA MATSUSHAMA K, NARUTO M;

PR WPI; 95-131181/17.

PR WOUND treatment using monocyte chemotactic factor relates to a new remedy for curing wounds which, instead cof comprising a growth factor, comprises a monocyte chemotactic cactivating factor (WCAF) or its variants or derivatives. The factor has coptent effect on skin wounds and ulcers. The present sequence is human MCAF, the activity of which is exemplified as the new remedy.

SQ Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches
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The peptides can be used to prevent restenosis, e.g. in patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .T 15
R28660 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R87680 standard; protein; 76
R87680;
05-MAR-1996 (first entry)
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Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated that they inhibit the monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated that they inhibit the monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated that they inhibit the monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated that they inhibit the monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated that they make the monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated that they make the monocyte chemo-attractant protein-1 (MCP-1) derivatives are mutated that they make the monocyte chemo-attractant protein-1 (MCP-1) derivatives are mutated that they make the monocyte chemo-attractant protein-1 (MCP-1) derivatives are mutated that they make the monocyte chemo-attractant protein-1 (MCP-1) derivatives are mutated that they make the monocyte chemo-attractant protein-1 (MCP-1) derivatives are mutated that they make the monocyte chemo-attractant protein-1 (MCP-1) derivatives are mutated that they make the monocyte chemo-attractant protein-1 (MCP-1) derivatives are mutated that they make the monocyte chemo-attractant protein-1 (MCP-1) derivatives are mutated that they make the monocyte chemo-attractant protein-1 (MCP-1) derivatives are mutated that they make the monocyte chemo-attractant protein-1 (MCP-1) derivatives are mutated that they make the monocyte chemo-attractant protein-1 (MCP-1) derivatives are mutated that they make they make the monocyte chemo-attractant protein-1 (MCP-1) derivatives are mutated that they make they make the monocyte chemo-attractant protein-1 (MCP-1) derivatives are mutated that they make they m
12-NOV-1992.
27-APR-1992; J00550.
09-MAY-1991; JP-135950.
                                                                                                                                                                                                                                                                                                                               Plasmid; monocyte chemotactic factor; MCF; translation; termination; terminator; initiation; ribosome binding site;
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                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                            RBS; promoter;
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MCF.
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Local Similarity 100.0%;
hes 6; Conservative
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76 AA;
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                                                                                                                                                                                                                                                                            tryptophan;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            76
                                                                                                                                                                                                                                                                            repressor
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Pred. No. 8.87e+01;
0; Mismatches 0
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Pred. No. 8.87e+01;
0; Mismatches (
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factor; MCAF; wound remedy.
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RESULT PLANTS OF THE PROPERTY 
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        Matches
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02-OCT-1992; 965678.

22-OCT-1992; US-965678.

27-MAY-1994; US-250958.

(UNMI ) UNIV MICHIGAN.

KUNKEL SL, Lyle LR, St
                                                                                                                                                                                                                        Anti-sense Monocyte Chemotactic Protein-1 oligo:nucleotide(s) - useful for therapy or diagnosis of restenosis, etc.

Disclosure; Column 13-14; 16pp; English.

This is the amino acid sequence of the human monocyte chemoattractant protein (MCP)-1, a member of the C-C chemokine family. MCP-1 is a potent stimulator of monocyte chemotaxis and is produced by injured vascular smooth cells thus attracting monocytes and macrophages which infiltrate the injured area and release growth factor. This causes proliferation of the vascular smooth cells resulting in restenosis. The gene sequence can be used to generate antisense sequences e.g. T48093-7, which can be used to inhibit in vitro MCP-1 prodn. by mononuclear cells e.g. lymphocytes or macrophages, or smooth muscle cells, esp. in order to prevent vascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-FSDB; 30745.46.

Prodn. of polypeptide(s) having monocyte chemotactic using expression plasmids with E. coli elements and s E.coli strains

Claim 1; Page 48 + Page 36; 56pp; English.
An expression plasmid, pHM483, for producing MCF(76) of 76 amino acids was constructed. The prod. can be treating bacterial infectious diseases.

Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Monocyte chemotactic protein 1.

Human; monocyte chemoattractant protein; antisense; inhibition; mononuclear cell; lymphocyte; macrophage; smooth muscle cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JT 16
W09374 standard; Protein; 76
W09374;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (DAIN ) DAINIPPON PHARM CO
Fukui T, Matsuo N, Yamada M
WPI; 92-398864/48.
                                                                                                                                                                  Sequence
                                                                                                                                                                                                       macrophages, restenosis.
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1 EICADP
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Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    el SL, Lyle LR,
96-505405/50.
Similarity 100.0%;
6; Conservative
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    Pred.
                                             Score 44; DB 20;
Pred. No. 8.87e+01
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Pred. No. 8.87e+01;
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RESULT 17
ID W11131 standard; protein;

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Best Local S
Matches
                                                                                                                            US7304234-A.
20-JUL-1989.
31-JAN-1989; 030423.
31-JAN-1989; US-304234.
              Peptide is
leukocytes
                                                                                                                                                                                                                                            Human.
                                                                                                                                                                                                                                                       17-JAN-1990 (first entry)

Peptide from human glioma cell line U-105MG.
Glioma; leucocyte; chemotaxis; neoplasms.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         targetted delivery of radioactive agent transple 10; Column 19-20; 15pp; English.
W11131 represents mature human monocyte chemoattractant protein-1 (MCP-1). MCP-1 was radionuclide labelled and used in a method for imaging a target site in vivo in an animal. Labelled MCP-1 was allowed to accumulate at a target site (having MCP-1 receptors) in the animal and detected so as to image the target site. Any Cys-Cys or Cys-Xaa-Cys chemokine carrying either iodine-123 or iodine-131 can be used in the method. Especially preferred is neutrophil activating peptide-2 (NAP-2) which recognises interleukin-8 receptors and is labelled with technetium-99m, indium-111, copper-62, rhenium-186 or rhenium-188. The method can be used for imaging a site of infection, inflammation, neoplasm, atheromatous lesion or restenosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-JUN-1997 (first entry)
Mature human monocyte chemoattractant protein-1 (MCP-1).
MCP-1; mature chemoattractant protein-1; cytokine; interleukin-8;
IL-8; neutrophil activating peptide; labelling; imaging; targeting;
IT-8; neutrophil activating peptide; labelling; atheromatous lesion;
                                                                                          (USSH) US Dept. of Health and Yoshimura T; Robinson E; Appel WPI; 89-263501/36.
                                                                                                                                                                                                                   modified_site
                                                                                                                                                                                                                                  Key
                                                                                                                                                                                                                                                                                       79 18
P90292;
P90292;
17-JAN-1990 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-OCT-1992; US-956862.
29-APR-1994; US-235659.
(MLCW ) MALLINCKRODT MEDICAL INC.
(UNMI ) UNIV MICHIGAN.
Kunkel SL, Lyle LR, Strieter Rh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Radio: labelling neutrophil-activating peptide(s)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US5605671-A.
25-FEB-1997.
05-OCT-1992; 956862.
05-OCT-1992; US-956863.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc_difference
                                                     neoplasms
                                                                                New peptide with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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10-JUN-1997
 Sequence
                                                                     from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   restenosis.
                                                                                                                                                                                                                                                                                                                                                                                               50 eicadp 55
                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
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                         losure;
ide is d
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                                                                  glioma or leucocyte
                                                                                                                                                                                                                                                                                                                                                                       EICADP
            ; page 3; 46pp; English derived from glioma cel and has mol. wt. 8400.
and
76 /
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                76 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
llarity 100.0%;
Conservative
                                                               specific chemotactic a eucocyte cells, useful
                                                                                                                                                                                         /label= OTHER
/note= "pyrog
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                                                                                                                                                                                        "pyroglutamic acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "X= any amino acid"
            glioma cell line wt. 8400. Used to
                                                                                                       Appella
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Pred.
0; M
                                                                                                      i Human.
ella E; ]
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                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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No. 8.87e+01
                                                                                                          Leonard E
                                                              activity for monocytes - 
l for treating infections
                         U-105MG
            treat
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            infections
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                                                                  infections
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           ) or from
neoplasms.
                                                                 isolated and
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Query Match

100.0%;

Score

44;

DB

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Length

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RESULT 19
RESULT 19
RESJUST 1994
AC RESJS98;
DT 15-DEC-1994
DE Sense MCP-1.
KW Antisense; mc
WW Antisense; mc
OS Mammalian.
FH Key
FT misc_differer
FN W09409128-A.
PD 28-APR-1994.
PD W09409128-A.
PD 28-APR-1994.
PD W09409128-A.
PT w15c_dT-1993;
PR 22-OCT-1993;
PR 22-OCT-1993;
PR 22-OCT-1993;
PR 28-APR-1994.
PT w15c_dT-1993;
PR 28-APR-1994.
PT w15c_dT-1993;
PR 28-APR-1994.
PT w15c_dT-1993;
PR 28-APR-1994.
PT w15c_dT-1993;
PR WPI; 94-1513]
PT Anti-sense mc
PT w25clusur r rest
PS DiscClosure; if
CC monocyte cher
CC monocyte cher
CC monocyte cher
CC energy alpha
cC entiters cutt
CC compounds in:
CC monocytes ari
CC proliferation
Sq Sequence 7:
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IDENTIFY
AC RESULT

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Best Local :
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Matches 6; Conservative
                       18-MAY-1995.
07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANU
ROllins B, Zhang YJ;
WPI; 95-215051/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R87675 stand
R87675;
21-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The sequences given in £53398-99 represent sense and antisense monocyte chemotactic protein-1 (MCP-1) respectively. These oligonucleotides may be labelled with a radionuclide and use therapeutically for the treatment of vascular restenosis.

Radiolabelled antisense MCP-1 compounds may be constructed using his energy alpha or beta emitting isotopes rather than the gamma emitters outomarily used for diagnostic purposes. Antisense MCP-1 compounds inactivate MCP-1 or inhibit production of MCP-1 so that monocytes are not attracted to the area of vascular injury and
                                                                                                                                                                                                   disulfide_bond
wo9513295-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                             (28-Asp) MCP-1.
monocyte chemoattractant
                                                                                                                                                                                                                                                           disulfide_bond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            proliferation of 
Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      vascular restenosis or potential restenosis Disclosure; Page 5; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Anti-sense monocyte chemotactic protein-l oligo:nucleotide(s) and peptide(s) - is used for inhibiting, treating or imaging areas of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-OCT-1993; U10074.
22-OCT-1992; US-965678
(MICW) MALLINCKRODT M
     Human
                                                                                                                                                                                                                                                                                                                modified_site
                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                      angioplasty.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          misc_difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       radionuclide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           50 eicadp 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match 100.0%;
Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  50 eicadp 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 EICADP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 EICADP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94-151314/18
monocyte chemo-attractant protein-1 (MCP-1) derivs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       monocytes; vascular injury.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RNA; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    vascular restenosis; alpha;
                                                                                                                                                                                                                             /note=
11..36
12..52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         vascular cells is inhibited.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note=
                                                                                        CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  monocyte chemotactic
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                                                                                                                                                                                                                                                                                  "Tyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Unspecified
                                                                                                                                                                                                                                                                                                                                                                                                                             protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 76
                                                                                        INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 44;
Pred. No.
0; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. 8.87e+01;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                     in the native
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INC
                                                                                        INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                MCP-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8.87e+01;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                             mutant;
                                                                                                                                                                                                                                                                                  sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein-1; MCP-1;
beta; emitting isotope;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
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RESULT 22 ID W22672 standard; Protein; 77 AA.
                                                                                                                                                                                                                                                                               ripinal monocyte chemo-attractant protein-1 (MCP-1) derivs. - are ripinal monocyte chemo-attractant activity of capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis? Claim 5; Page 11; 22pp; English.

Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28-Tyr by asspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino carids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Blology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients
                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                 Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis Claim 3; Page 11; 22pp; English.
Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-MAY-1995.
07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC ROllins B, Zhang YJ;
WPI; 95-215051/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9513295-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (24-Arg) MCP-1.
monocyte chemoattractant protein; MCP-1; mutant; restenosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-FEB-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R87676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R87676 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  undergoing
                                                                                                                                                                                                                                                                     undergoing
                                                                                                                                                                   Local Similarity 100.0%;
les 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          50 eicadp 55
                                                                                                                           50 eicadp 55
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                                                                                  EICADP 6
                                                                                                                                                                                                                                                coronary artery angioplasty.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               coronary artery angioplasty. 76 AA;
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llarity 100.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "Arg in the native sequence is replaced by Phe" 11..36 12..52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein; 76 AA
                                                                                                                                                               Score 44;
Pred. No. :
0; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 44; DB 14; Length 76; Pred. No. 8.87e+01; 0; Mismatches 0; Indels
                                                                                                                                                                   Mismatches
                                                                                                                                                                                    8.87e+01;
                                                                                                                                                                                                           DB 14;
                                                                                                                                                                                                       Length 76;
                                                                                                                                                                 Indels
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Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Bac 2 variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthrifis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and compounder to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
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19-MAR-1998 (first entry)
Bac 2 chemokine betail or monocyte chemotactic protein 4 variant.
Human; chemokine betail0; Ck betail0; treatment; antagonist;
solid tumour; infection; autoimmune disease; asthma; antibody;
fibrotic disease; psoriasis; neurodegenerative disease;
wound healing; haematopolesis regulation; gene therapy;
chromosome identification; monocyte chemotactic protein 4;
                                                        New anti:sense oligo:nucleotide(s) and peptide(s) for inhibiting restenosis - are directed against C-C family cytokine(s) such as monocyte chemotactic protein, opt. radio:labelled for therapy or
                                                                                                                                                                         Lyle LR, Thomas-Mi
WPI; 95-263703/34.
                                                                                                                                                                                                                                                                                                                                                                                                          monocyte; chemotaxis; vascular smooth muscle cell; proliferation; restenosis; balloon angioplasty.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Adams M, Alderson R, Applebaum E, Parmelee D, White J; WPI; 97-435153/40.
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23-FEB-1996; WO-U02598.
                                                                                                                                                 N-PSDB; T03528.
                                                                                                                                                                                                                              20-JUL-1995.
13-JAN-1995; U00605.
14-JAN-1994; US-182917.
(MLCW ) MALLINCKRODT MEDICAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense; monocyte chemotactic protein-1; MCP-1;
"C-C" family; chemoattractant cytokine; chemokine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mature MCP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-MAR-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R86859 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
W09731098-A1.
                                                                                                                                                                                                                                                                                                                                                       WO9519167-A1.
                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match 100.0%;
Local Similarity 100.0%;
nes 6; Conservative
                                                                                                                                                                                                            Thomas-Miller
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Page 5; 50pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA;
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Pred. No. 8.87e+01;
0; Mismatches 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                        macrophage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     stimulation;
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                                                                                                                                                                                                                                                        problem and fibrosis

Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Droll/2 variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 can be used to reduce excessive levels of Ck beta10 can be used to reduce excessive levels of Ck beta10 can be used to reduce excessive levels of Ck beta10 can be used to reduce excessive levels of Ck beta10 can be used to reduce excessive levels of Ck beta10 can be used to reduce excessive levels of Ck beta10 can be used to reduce excessive levels of Ck beta10 can be used to deseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck beta10 cDNA can be used to isolate genes encoding similar peptides, in gene therapy can be used to isolate genes encoding similar peptides, in gene therapy can be used to isolate genes encoding similar peptides, in gene therapy can be used to isolate genes encoding similar peptides, in gene therapy can be used to isolate genes encoding similar peptides.
                                                                                                              Query Match
Best Local :
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Best Local Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Droll/2 chemokine betall or monocyte chemotactic protein 4 variant. Human; chemokine betall; (k betall; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopolesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4; leukaemia; MCP-4; Droll/2 variant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This sequence represents the mature form of monocyte chemotactic protein-1 (MCP-1). MCP-1 is a member of the "C-C" family of chemoattractant cytokines or chemokines. It is a potent stimulator of monocyte chemotaxis and has an extemely high degree of specificity of monocyte chemotaxis.
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19-MAR-1998 (first entry)
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23-FEB-1996; WO-U02598
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53 eicadp 58
                                                                                                              Local Similarity 100.0%;
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                                                                                                                                                                                                                                        for chromosome uence 79 AA;
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Pred. No. 8.87e+01;
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8.87e+01;
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                              01-MAY-1997.
23-OCT-1995; U16959.
24-OCT-1995; US-0060:
(SMIK) SMITHKLINE BI
Kreider BL, Li H, I
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Example 11; Fig 5; 83pp; English.
The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Bac 1 variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10. Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate
                                                                                                                                    Stem cell mobilising chemokine CKbeta-10.

Haematopoletic cell; parasitic infection; colony stimulating factor; haematoregulator; immune response; bacterial infection; transplant; wound healing; bone marrow; immunosuppression; regeneration; neoplastic disease; viral disease; gene therapy; cytotoxic drug. Synthetic.
                                                                                                                                                                                                                                                       LT 26
W17665 standard; peptide;
W17665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck betail cDNA can be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
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W22671
W22671;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Parmelee D, White J; WPI; 97-435153/40.
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Adams M, Alderson R, Appl
                                                                                                                    WO9715594-A1.
                                                                                                                                                                                                                                       16-DEC-1997 (first entry)
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Local Similarity 100.0%;
hes 6; Conservative
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ler BL, Li H, Pelus L, Wl
97-258956/23.
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chemokine(s) able to mobilise stem cells - used where
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Pred. No. 8.87e+01;
0; Mismatches 0
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Claim 7; Page 11-12; 24pp; English.

Cr The present sequence represents a chemokine, CKbeta-10, which is capable of mobilisaing stem cells. The chemokine can be used therapeutically to improve stem cell mobilisation, optionally together with a colony comprove stem cell mobilisation, optionally together with a colony comprove stem increased level of haematoregulatory agent. It can be used therapeutic manune response to chronic infection (particularly concrease the immune response to chronic infection (particularly concrease) to particularly concrease the immune response to chronic infection (particularly concrease) to particularly to particularly concrease the immune response to chronic infection (particularly to particularly to p
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07-JUN-1995; 480449.
07-JUN-1995; US-480449.
(ICOS-) ICOS CORP.
Godiska R, Gray PW;
                                                                                                                                                                                                                                                                                                    Antibodies specific for macrophage-derived chemokine - useful for purifying or detecting the chemokine or modulating its activity claim 3; Column 21-24; 22pp; English.

This sequence represents the macrophage-derived chemokine (MDC). This protein is used to produce the antibodies of the invention. The antibodies are useful for purifying MDC polypeptides, for detecting endogenous MDC in a host, and for modulating binding of MDC to its receptors. The DNA encoding this sequence can be used for identifying and isolating non-human MDC homologues. The MDC protein is potentially useful for treating inflammatory disorders, cancer, etc. Antagonists of MDC can be used for treating inflammatory disorders, cancer, etc. Antagonists of MDC can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Macrophage-derived chemokine.
Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy; arthritis; inflammatory disorder; cancer; Crohn's disease;
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W40811;
01-APR-1998 (first entry)
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Local Similarity 100.0%;
les 6; Conservative
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98-008038/01
                                                                    EICADP 6
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25..93
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Pred. No. 8.87e+01;
0; Mismatches 0
                                                                                                                                                            Score 44; DB 27;
Pred. No. 8.87e+01;
0; Mismatches 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PS Claim 10; Page 46; 58pp; English.

CW W07604 shows human chemokine beta-13 (Ck-beta-13), a member of the CC (Cys-Cys) branch of intercrine chemokines. Ck-beta-13 is useful for Creating patients lacking chemokine beta-13 by gene therapy. Ck-beta-13 ck-beta-13 is useful for treating patients lacking chemokine beta-13 by gene therapy. Ck-beta-13 ck stimulates the invasion and activation of host defence cells making it cells in the chemokine induces chemotactic migration of monocytes, cells making it cells. The chemokine induces chemotactic migration of monocytes, cells infections. The chemokine induces chemotactic migration of monocytes, cells where they are needed. Eosinophils may be attracted to the site of a parasitic infection to kill parasite larvae. Ck-beta-13 also crecruits debris-clearing and connective tissue promoting inflammatory cells, and is therefore used to stimulate wound healing, prevent cells, and is therefore used to stimulate wound healing, prevent consist. Ck-beta-13 may also be used for treating leukaemia, T-cell cells chemokine which is useful for treating certain autoimune diseases, chemokine which is useful for treating certain autoimune diseases, atherosclerosis, Ck-bota-13 antagonists inhibit activity of the chemokine which is useful for treating certain autoimune diseases, atherosclerosis, Chronic inflammatory and infective diseases, allergic chemokine which arthrifis at 11 icnsis and bone marrow failure.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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                                                                                                                                                                                                                                                                                              Macrophage derived chemokine for treating inflammation.
MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease; rheumatoid arthritis; chemotaxis; fibroblast proliferation;
                                                                                                                                                                                                                                                                                                                                                                                                            W20058;
11-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-SEP-1997 (first entry)
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   WO9640923-A1.
19-DEC-1996.
                                                                                                                                                                                                                                                                         wound healing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               W20058 standard; Protein; 93
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB; T44026.
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(SMIK ) SMITHKLINE BEECHAM CORP.
Li H, Seibel G:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-JUN-1995; WO-U07294.
06-JUN-1995; WO-U07294.
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12-DEC-1996.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rheumatoid arthritis, silicosis and bone marrow 93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                     angiogenesis; inflammation.
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                                                                                                   /label= sig_peptide
25..93
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                                                                   /label= mat_protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 44; DB 23; Length 93; Pred. No. 8.87e+01; 0; Mismatches 0; Indels
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S Claim 1; Page 36-37; 47pp; English.

This polypeptide comprises human macrophage-derived monocyte chemotactic protein-5 (MCP-5), a novel C-C chemokine. This maino acid sequence was deduced from a cDNA clone (see T90880 and T90883) isolated from a human macrophage cDNA clibrary. A claimed method for producing MCP-5 comprises culturing a host cell that is stably transformed or transfected with MCP-5 polynucleotide. Also claimed is a hybridoma that produces a monoclonal antibody (MAb) that is specifically reactive with the mature MCP-5. MCP-5 (or its analogues and fragments) is used to enhance the immune response in cases of wounds or infections, while its inhibitors (e.g. the MAb) are
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Best Local s
Matches
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07-JUN-1995; US-479620.
16-NOV-1995; US-558658.
(ICOS-) ICOS CORP.
GODISKA R. GRAY PW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's analogues may be used in the treatment of inflammatory diseases especially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and it's analogues also induce fibroblast proliferation having a positive effect in wound healing and angiogenesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes and/or primers for the identification of MDC encoding sequences can be derived from MDC encoding sequences. Sequence
                                                                                                                                                                                                                                                                                                                                                                                            N\text{-}PSDB;\ T90880. 
 Polynucleotide encoding monocyte chemotactic protein-5 - useful in treatment of e.g. inflammation, atherosclerosis, angiogenesis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ICOS-) ICOS CORP.
Godiska R, Gray PW;
WPI; 97-489645/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Monocyte chemotactic protein 5; MCP-5; human; macrophage; Monocyte chemotactic protein 5; MCP-5; human; macrophage; chemokine; inhibitor; antiinflammatory; atherosclerosis; Crohn's disease; arthritis; angiogenesis; tumour; metasta:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Macrophage derived chemokine (MDC) and analogues - used treatment of inflammatory diseases, MDC antibodies used Crohn's disease, rheumatoid arthritis, etc. Claim 1; Page 73; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09735982-A2.
02-OCT-1997.
26-MAR-1997; U04898.
27-MAR-1996; US-622851.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          W30191;
21-MAY-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IT 30 W30191 standard; Protein; 98 AA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Crohn's disease; arthritis; angiogenesis; therapy; diagnosis; medical imaging.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB; T76529
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hes 6; Conservative
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97-052324/05.
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/note= "(Claim 4)"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 44; DB 23; Le
Pred. No. 8.87e+01;
0; Mismatches 0;
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Best Local &
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                                                                                                                                                                                                             useful as anti-inflammatories in cases of e.g. arthritis and Crohn's disease, also for treatment of atherosclerosis, angiogenesis and tumour growth (or metastasis). The MCP-5 inhibitors can possibly also be used to reduce the damaging effects of chemo- and radio-therapy on myeloid progenitor cells, and to inhibit replication of HIV. MCP-5 can also be used to identify its cognate receptor, while MCP-5 peptides (or the analogues or receptors) are used to modulate MCP-5 activity and to identify MCP-5 agonists and antagonists.
                                                                                                                                         y Match 100.0%;
Local Similarity 100.0%;
les 6; Conservative
                                                                                                         72 eicadp
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Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

MPsrch_pp protein - protein database search, using Smith-Waterman algorithm Thu Apr 1 14:04:25 1999; MasPar time 2.73 Seconds 35.522 Million cell updates/sec

Tabular output not generated

Run on:

Description: Perfect Score: Title: >US-08-927-939-8 (1-6) from US08927939.pep

1 EICADP 6

Scoring table: PAM 150 Gap 15

131922 seqs, 16180660 residues

Post-processing: Minimum Match Listing first 0% 50 summaries

Database:

a-geneseq32 1:part1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7 8:part8 9:part9 10:part10 11:part11 12:part12 13:part13 14:part14 15:part15 16:part16 17:part17 18:part18 19:part19 20:part20 21:part21 22::part22 23:part23 24:part24 25:part25 26:part26 27:part27 28:part28 29:part29

Statistics: Mean 13.493; Variance 41.871; scale 0.322

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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Result No.	Score	Query Match	Length	DВ	ID	Description	Pred. No.
1	44	100.0	66	24	W13598	Monocyte chemoattract	8.87e+01
2	44	100.0	67	24	W13599	Monocyte chemoattract	8.87e+01
w	44		67	14	R73915	Human monocyte chemoa	8.87e+01
4	44	100.0	83	24	W17668	Stem cell mobilising	8.87e+01
տ	44	100.0		24	W13597	Monocyte chemoattract	8.87e+01
σ	44	100.0	69	23	W20062	Human macrophage deri	8.87e+01
7	44	100.0	69	14	R87678	des(2-8) MCP-1.	8.87e+01
80	44	100.0	69	23	W20061	Human macrophage deri	8.87e+01
9	44	100.0	69	24	W13596	Monocyte chemoattract	8.87e+01
10	44	100.0	70	23	W20060	Human macrophage deri	8.87e+01
11	44	100.0	71	27	W22675	Drol3+ chemokine beta	8.87e+01
12	44	100.0	75	27	W22673	Bac 3 chemokine betal	8.87e+01
13	44	100.0	76	14	R87677	(3-Ala) MCP-1.	8.87e+01
14	44	100.0	76	15	R87680	Monocyte chemotactic	8.87e+01
15	44	100.0	76	v	R28660	MCF.	8.87e+01
16	44	100.0	76	20	W09374	Monocyte chemotactic	8.87e+01
17	44	100.0	76	21	W11131	Mature human monocyte	8.87e+01
18	44	100.0	76	μ.	P90292	Peptide from human gl	8.87e+01

50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	ω ω	32	31	30	29	28	27	26	25	24	23	22	21	20	19
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R76127	W23643	W26655	W42072	R70804	R38926	R38940	W00667	W10099	W14990	W44721	W19992	R24353	R73914	P95387	R70801	R28663	R70800	R93087	W22670	W30191	W20058	W07604	W40811	σ	~	67	U	67	67	R87675	339
phage infl	de		a	∂	Gln	Phe28>Glu, Gln	reas expressed c	Human eotaxin.	eosinocyte C	acid sequence	ξ,	ine encode	monocyte	onocyte chemo	Chemoattractant prote		attractant	chemokine beta	Human chemokine betal		Macrophage derived ch	Cytokine beta-13 stim	Macrophage-derived ch	m cell mobilising	Bac 1 chemokine beta1	`	ure MCP-1.	c 2 chemokin	-Arg) MCP-1	28-Asp) MCP-	Sense MCP-1.
	. 88e	. 4 6e	.466	.466	.46∈	.466	.146	٠.	1.14e+02	_	<u>.</u>	87	8	89	87	87	œ	@	8		œ	87	@	&	89	87	.87e+0	.87e+0	.87e+0	œ	.87e+0

## ALIGNMENTS

RESULT pri anti-inflammatory agent
problems by the present sequence represents an analogue, MCP-1 (10-76), of monocyte
chemoattractant protein-1 (MCP-1). The analogue, which lacks the
n-terminal amino acids 1-9 of MCP-1, acts as an antagonist of MCP-1
as it lacks MCP-1 biological activity and inhibits binding to a MCP-1
creceptor. The analogue is useful as an anti-inflammatory agent to block
the effects of MCP-1 which is an inflammatory mediator causing migration
of monocytes and other cells e.g. basophils and lymphocytes into
inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
diseases. The analogue competes more effectively with MCP-1 for binding
MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably
providing 50% inhibition of binding at a 25:1 ratio or less, compared
Sequence 66 AA; M13598 standard; peptide; 66 AA.
W13598;
W13598;
O7-NOV-1997 (first entry)
Monocyte chemoattractant protein analogue MCP-1 (10-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte;
chronic inflammatory disease; arthritis; arteriosclerosis; CA2152141-A. 20-DEC-1996. 19-JUN-1995; 152141. 19-JUN-1995; CA-152141. N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) - lacks MCP-1 activity and inhibits receptor binding, useful as Gong J, Lewis I; WPI; 97-165844/16. Homo sapiens. (LEWI/) LEWIS I. lung disease. allergy;

Query Match

100.0%; Score 44; DΒ 24; Length 66

```
anti-inflammatory agent
PT anti-inflammatory agent sequence represents an analogue, which lacks the
CC chemoattractant protein-1 (MCP-1). The analogue, which lacks the
CC chemoattractant protein-1 (MCP-1), acts as an antagonist of MCP-1
CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1
CC receptor. The analogue is useful as an anti-inflammatory agent to block
CC the effects of MCP-1 which is an inflammatory mediator causing migration
CC of monocytes and other cells e.g. basophils and lymphocytes into
CC inflammation sites. MCP-1 has been implicated in allergic and chronic
CC diseases. The analogue competes more effectively with MCP-1 for binding
CC MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably
CC providing 50% inhibition of binding at a 25:1 ratio or less, compared
                              RESULT ID RESULT IN RESULT
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Best Local
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Matches
(SHAR/) SHARMA L R. (VALS/) VAN ALGTYNE D. (SHARMA L R. VAN ALSTYNE D. Sharma LR, Van Alstyne D; WPI; 95-147431/19.

New peptide(s) and corresp. antibodies for the treatment of meningitis - the peptide(s) corresp. to homologous antigenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human monocyte chemoattractant factor hMCP-3; chemokine; vaccine; Human monocyte chemoattractant factor; hMCP-3; chemokine; vaccine; meningitis related homologous antigenic sequence; MRHAS; RV-1; immunoassay; diagnosis; treatment; prophylactic; bacterial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        T 3
R73915 standard; protein;
R73915;
                                                                                                                                                                                                                                                                                 28-SEP-1994; CA0516.
28-SEP-1993; US-127499.
                                                                                                                                                                                                                                                                                                                                                                     WO9509232-A.
06-APR-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-DEC-1995 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gong J, Lewis I; WPI; 97-165844/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-NOV-1997 (first entry)
Monocyte chemoattractant protein analogue MCP-1 (11-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) lacks MCP-1 activity and inhibits receptor binding, useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
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W13599;
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Local Similarity 100.0%;
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0; 1
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RESULT
ID WI
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M13597 standard; peptide; 68 W13597; 07-NOV-1997 (first entry)

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Best Local Similarity 100.0%;
Matches 6; Conservative
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Best Local S
Matches
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R73915 is the chemokine Human monocyte chemoattractant factor hMCP-3. It contains the meningitis related antigenic sequences (MRHAS) claimed in R73986 and R73908, which are recognised by a monoclonal antibody from the hybridoma Rubella virus (RV)-1. The claimed MRHAS peptides may be used in immunoassays to diagnose the presence of bacterial and/or viral meningitis agents in a sample, or in prophylactic and therapeutic meningitis treatments. The peptides may also be used as vaccines against meningitis.

NB: Identified by matching corresponding MRHAS peptides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Stem cell mobilising chemokine CKbeta-13.

Haematopoietic cell; parasitic infection; colony stimulating factor; haematoregulator; immune response; bacterial infection; transplant; wound healing; bone marrow; immunosuppression; regeneration; neoplastic disease; viral disease; gene therapy; cytotoxic drug.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic. 
W09715594-Al.
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24-OCT-1995; US-006051
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EICADP
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6; Conservative
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                                                                                                                                                                                                                                                                                                                                   A,
                                                                                                                                                    Score 44; DB 24; LA
Pred. No. 8.87e+01;
0; Mismatches 0;
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Pred. No. 8.87e+01;
0; Mismatches 0;
                                                                                                                                                                                                                                   Length 68;
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SC Claim 25; Page 84; 106pp; English.

SC Claim 25; Page 84; 106pp; English.

CC (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's considered analogues may be used in the treatment of inflammatory diseases analogues may be used in the treatment of inflammatory diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and it's analogues also induce fibroblast consideration having a positive effect in wound healing and angiogenesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes and/or primers for the identification of MDC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            anti-inflammatory agent
Claim 7: Page 5: 27pp; English.
Claim 7: Page 6: Page 7: Page 
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Best Local :
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07-JUN-1996; U10114.
07-JUN-1995; US-479620.
16-NOV-1995; US-558658.
(ICOS-) ICOS CORP.
GOdiska R. Gray PW;
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W20062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human macrophage derived chemokine analogue.
MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease; rheumatoid arthritis; chemotaxis; fibroblast proliferation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 wound healing; angiogenesis; inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) - lacks MCP-1 activity and inhibits receptor binding, useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gong J, Lewis I; WPI; 97-165844/16.
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19-JUN-1995; CA-152141.
(LEWI/) LEWIS I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9640923-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                42 eicadp 47
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Best Local Similarity 100.0%;
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Best Local
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W20061 standard; Protein; 69
W20061;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis Claim 4; Page 11; 22pp; English.

Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Collins and Col
19-DEC-1996.
07-JUN-1996; U10114.
07-JUN-1995; US-479620
16-NOV-1995; US-558658
                                                                                                                                                                                                                                                                                                                               11-SEP-1997 (first entry)
Human macrophage derived chemokine analogue.
MDC; macrophage derived chemokine; C-C; Cys-Cys;
rheumatoid arthritis; chemotaxis; fibroblast prol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-MAY-1995.
07-NOV-1994; U12874.
12-NOV-1993; US-152301
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                                                                                                                                                                                     Synthetic.
W09640923-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989. The peptides can be used to prevent restenosis, e.g. in patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (DAND ) DANA FARBI
Rollins B, Zhang
WPI; 95-215051/28.
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21-FEB-1996
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Similarity 100.0%;
6; Conservative
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69 AA;
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2..3
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deleted between these residues"
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Pred. No. 8.87e+01;
0; Mismatches C
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Pred. No. 8.87e+01
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proliferation;
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                                                                                                                                                                                 PT anti-inflammatory agent

PS Claim 5: Page 5: 27pp: English.

CC The present sequence represents an analogue, MCP-1 (8-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the CC N-terminal amino acids 1-7 of MCP-1, acts as an antagonist of MCP-1 (CC Inflammatory agent to block of the effects of MCP-1 which is an inflammatory agent to block CC the effects of MCP-1 which is an inflammatory mediator causing migration inflammation sites. MCP-1 has been implicated in allergic and chronic conflammation sites. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding CC MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared Sequence 69 AA;
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PM Macrophage derived chemokine (MDC) and analogues - used in the pr treatment of inflammatory diseases, MDC antibodies used to treat pr Crohn's disease, rheumatoid arthritis, etc.

Claim 25; page 84; 105pp; English.

CC A new macrophage derived chemokine, MDC, a member of the C-C (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's canalogues may be used in the treatment of inflammatory diseases (C especially diseases characterised by monocyte chemotaxis towards a company of the company of 
                                                                                                 Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-terminally truncated monocyte chemo:attractant protein-lacks MCP-1 activity and inhibits receptor binding, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gong J, Lewis I; WPI; 97-165844/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Monocyte chemoattractant protein analogue MCP-1 (8-76). Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-DEC-1996.
19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
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CA2152141-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-NOV-1997 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ICOS-) ICOS
                                                43 eicadp 48
                                                                                                                   Local Similarity 100.0%;
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1 EICADP
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                                                                                    Score 44; DB 24; Le
Pred. No. 8.87e+01;
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Pred.
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No. 8.87e+01;
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Woy640923-Al.

PN WO9640923-Al.

PN WO9640923-Al.

PD 19-DEC-1996.

PR 07-JUN-1995; US-58658.

PR 07-JUN-1995; US-58658.

PR (ICOS-) ICOS CORP.

PR 16-NOV-1995; US-58658.

PA (ICOS-) ICOS CORP.

PI Godiska R, Gray PW;

DR WPI, 97-052324/05.

PT Macrophage derived chemokine (MDC) and analogues - used in the treatment of inflammatory diseases, MDC antibodies used to treat PT Crohn's disease, rheumatoid arthritis, etc.

PS Claim 25; Page 83; 106pp; English.

CC A new macrophage derived chemokine, MDC, a member of the C-C (CYs-CYs) subfamily of cytokines has been isolated. MDC and it's canalogues may be used in the treatment of inflammatory diseases capecially diseases characterised by monocyte chemotaxis towards a capecially diseases characterised by monocyte chemotaxis towards a coroliferation having a positive effect in wound healing and capisate to the cormation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and catherosclerosis. Probes and/or primers for the identification of MDC encoding sequences can be derived from MDC encoding sequences.

So Sequence 70 AA;
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Best Local
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asthma and fibrosis

Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Drol3+ variant, which we have a constant patients deficient in Ck beta10, while a Ck is
                                                                                                                                                                                                                                                                                                                                                    28-AUG-1997.
23-FEB-1996;
23-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-MAR-1998 (first entry)

Drol3+ chemokine betal0 or monocyte chemotactic protein 4 variant. Human; chemokine betal0; Ck betal0; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4; leukaemia; MCP-4; Drol3+ variant.
                                                                                                                                                          Polypeptide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infection.
                                                                                                                                                                                                                               (HUMA-) HUMAN GENOME SCI INC.
Adams M. Alderson R. Applebaum
Parmelee D. White J;
WPI: 97-435153/40.
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W20060;
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MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease; rheumatoid arthritis; chemotaxis; fibroblast proliferation;
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Similarity 100.0%;
6; Conservative
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WO-U02598
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Pred. No. 8.87e+01;
0; Mismatches 0
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                                                                                                                                                                                                          problem and fibrosis

Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Bac 3 variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates cantibodies. Labelled Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and come marrow failure, silicosis, sarcoidosis. Ck beta10 cDNA can be used to isolate genes encoding similar peptides, in gene therapy conditions of the compound componed identification.
                                                           Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 6; Conservative
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (HUMA-) HUMAN GENOME SCI INC.
Adams M. Alderson R. Applebau
Parmelee D. White J;
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23-FEB-1996; U02598.
23-FEB-1996; WO-U025
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                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Polypeptide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infection,
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eicadp 54
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Similarity 100.0%;
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                                                                                         44; DB 27;
No. 8.87e+01;
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                                                                                                                    Length 75;
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Best Local
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13-SEP-1994; J01512.

13-SEP-1993; JP-227385.

(TORA) TORAY IND INC.

Matsushima K, Naruto M;

WPI; 95-131181/17.
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R87677;
21-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      endogenous MCP-1 and can be used to treat restenosis claim 6; Page 11; 22pp; English.

Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28 Tyr by aspartate; (2) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients
wound treatment using monocyte chemotactic factor - has potent therapeutic effect on skin wounds and ulcers Disclosure; Page 12; 22pp; Japanese.

The invention relates to a new remedy for curing wounds which, instead of comprising a growth factor, comprises a monocyte chemotactic activating factor (MCAF) or its variants or derivatives. The factor has potent effect on skin wounds and ulcers. The present sequence is human MCAF, the activity of which is exemplified as the new remedy.

Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R87680 standard; protein; 76 AA. R87680; 05-MAR-1996 (first entry) Monocyte chemotactic activating monocyte chemotactic activating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-MAY-1995.
07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC.
ROllins B, Zhang YJ;
WPI; 95-215051/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - a capable of inhibiting the monocyte chemo-attractant activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens. W09507710-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        undergoing coronary artery angioplasty. Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9513295-A1.
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Similarity 100.0%;
6; Conservative
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                                                                                                                                                                                                                                                                                                  Naruto M;
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11..36
12..52
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Pred. No. 8.87e+01;
0; Mismatches C
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factor; MCAF; wound remedy.
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Best Local :
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Best Local Similarity 100.0%;
Matches 6; Conservative
                                                                                                           05-NOV-1996.
22-OCT-1992; 965678.
22-OCT-1992; US-965678.
27-MAY-1994; US-250958.
(UNMI) UNIV MICHIGAN.
KUNKel SL, Lyle LR, St.
WPI: 96-505405/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 48 + Page 36; 56pp; English.
An expression plasmid, pHM483, for producing MCF(76) consisting of 76 amino acids was constructed. The prod. can be used for e treating bacterial infectious diseases.

Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DAIN ) DAINIPPON PHARM CO LTD.
Fukui T, Watsuo N, Yamada M, Yamagishi J;
WPI; 92-398864/48.
N-PSDB; Q30745-46.
Prodn. of polypeptide(s) having monocyte chemotactic activity using expression plasmids with E. coli elements and specific
Anti-sense Monocyte Chemotactic Protein-1 oligo:nucleotide(s) useful for therapy or diagnosis of restenosis, etc. Disclosure; Column 13-14; 16pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-NOV-1992.
27-APR-1992; J00550.
09-MAY-1991; JP-135950
                                                                                                                                                                                                                                                                                                                                                    misc_difference
                                                                                                                                                                                                                                                                                                                                                                                                       misc_difference
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R28660 standard; Protein;
                                                                                           N-PSDB; T48092
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Local Similarity 100.0%;
hes 6; Conservative
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Pred. No. 8.87e+01;
0; Mismatches (
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RESULT
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P90292 standard; peptide;
P90292;
P90792;
17-JAN-1990 (first entry)

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                                                                                                                                                                                                                                                                            Radio:labelling neutrophil-activating peptide(s) - for imaging radio:labelling neutrophil-activating peptide(s) - for imaging radioactive agent service delivery of radioactive agent sexample 10; Column 19-20; 15pp; English.

Will31 represents mature human monocyte chemoattractant protein-1 (MCP-1). MCP-1 was radionuclide labelled and used in a method for imaging a target site in vivo in an animal. Labelled MCP-1 was allowed to accumulate at a target site (having MCP-1 receptors) in the animal and detected so as to image the target site. Any Cys-Cys or Cys-Xaa-Cys chemokine carrying either lodine-123 or lodine-131 can be used in the method. Especially preferred is neutrophil activating peptide-2 (NAP-2) which recognises interleukin-8 receptors and is labelled with technetium-99m, indium-111, copper-62, rhenium-186 or rhenium-188.

The method can be used for imaging a site of infection, inflammation, neoplasm, atheromatous lesion or restenosis.
                                                                                                                            Query Match
Best Local S
Matches
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Best Local :
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25-FEB-1997; 956862.
05-OCT-1992; US-956863.
05-OCT-1992; US-956862.
29-APR-1994; US-235659.
(MLCW ) MALLINCKRODT MEDICAL INC.
(UMMI ) UNIV MICHIGAN.
KUNKel SL, Lyle LR, Strieter RM;
WPI; 97-153541/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This is the amino acid sequence of the human monocyte chemoattractant protein (MCP)-1, a member of the C-C chemokine family. MCP-1 is a potent stimulator of monocyte chemotaxis and is produced by injured vascular smooth cells thus attracting monocytes and macrophages which infiltrate the injured area and release growth factor. This causes proliferation of the vascular smooth cells resulting in restenosis. The gene sequence can be used to generate antisense sequences e.g. T48093-7, which can be used to inhibit in vitro MCP-1 prodn. by mononuclear cells e.g. lymphocytes or macrophages, or smooth muscle cells, esp. in order to prevent vascular restracts.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mature human monocyte chemoattractant protein-1 (MCP-1).
MCP-1; mature chemoattractant protein-1; cytokine; interleukin-8;
IL-8; neutrophil activating peptide; labelling; imaging; targeting;
radionuclide; infection; inflammation; neoplasm; atheromatous lesion;
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50 eicadp 55
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Similarity 100.0%;
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                                                                                                                               Conservative
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                                                                                                                         Score 44;
Pred. No.
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Pred. No. 8.87e+01;
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The sequences given in R5398-99 represent sense and antisense monocyte chemotactic protein-1 (MCP-1) respectively. These coligonucleotides may be labelled with a radionuclide and use therapeutically for the treatment of vascular restenosis. Radiolabelled antisense MCP-1 compounds may be constructed using high cenergy alpha or beta emitting isotopes rather than the gamma emitters cutomarily used for diagnostic purposes. Antisense MCP-1 compounds inactivate MCP-1 or inhibit production of MCP-1 so that monocytes are not attracted to the area of vascular injury and C proliferation of vascular cells is inhibited.
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(USSH) US Dept. of Health and Human.
Yoshimura T; Robinson E; Appella E; Leonard
WPI; 89-263501/36.
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R53398;
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22-OCT-1992;
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Peptide is
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31-JAN-1989;
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EICADP 6
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derived from glioma cell line U-105MG (ATCC CRL9932) or from and has mol. wt. 8400. Used to treat infections and neoplasms 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RNA; DNA; monocyte chemotactic protein-1; MCP-1;
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CLaim 3; Page 11; 22pp; English.

Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the cuber substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg care: (1) substitution of 28 Tyr by aspartate; (2) substitution of 34 Arg care: (1) substitution of 37 Asp by Ala; and/or (4) deletion of anino acids 2-8. The present sequence is a specifically claimed human MCP-1 cand Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1398.

CC The peptides can be used to prevent restenosis, e.g. in patients considered according coronary artery angioplasty.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANG
ROLLINS B. Zhang YJ;
WPI; 95-215051/28.
                                                                                                                                                                         18-MAY-1995. U2-1874. 07-NOV-1994; U12874. 12-NOV-1993; US-152301. (DAND ) DANA FARBER CANCER INST INC ROllins B, Zhang YJ; WPI; 95-215051/28.
                              Human monocyte chemo-attractant protein-1 (MCP-1) derivs. capable of inhibiting the monocyte chemo-attractant active endogenous MCP-1 and can be used to treat restenosis claim 5; Page 11; 22pp; English.
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monocyte chemoattractant protein; MCP-1; mutant; restenosis;
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monocyte chemoattractant
Monocyte chemoattractant protein-1 (MCP-1)
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21-FEB-1996
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CC The present sequence is human chemokine beta10 (Ck beta10) or CC monocyte chemotactic protein 4 (MCP4) Bac 2 variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 Ck can be used to treat patients deficient in Ck beta10. While a Ck beta10 Ck cc beta10 can be used to treat leukaemia, solid tumours, chronic or Cpoportunistic infections, autoimmune diseases, asthma, fibrotic Cc diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates CC enribodies. Labelled Ck beta10 can be used to identify its cognate creeptor, while cells expressing the receptor can be used to screen CC compounds for (ant)agonist activity. The antagonist can be used to screen CC infectious diseases, allergies, prostaglandin dependent fever and CC bone marrow failure, silicosis, sarcoidosis, hyper-cosinophilic cs syndrome, lung inflammation and atherosclerosis. Ck beta10 cDNA can be used to isolate genes encoding similar peptides, in gene therapy CC and for chromosome identification.
                                                                                                                                                                            Query Match
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Best Local Similarity 100.0%;
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W22672 standard;
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23-FEB-1996; WO-U02598.
23-FEB-1996; WO-U02598.
(HUMA-) HUMAN GENOME SCI INC.
Adams M, Alderson R, Applebaum E
Parmelee D, White J;
WPI; 97-435153/40.
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13-JAN-1995; U00605.
14-JAN-1994; US-182917.
(MCCW ) MALLINCKRODT MEI
LVIG ID Thomas-Millor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This sequence represents the mature form of monocyte chemotactic protein-1 (MCP-1). MCP-1 is a member of the "C-C" family of chemoattractant cytokines or chemokines. It is a potent stimulator of monocyte chemotaxis and has an extemely high degree of specificity for this cell type. MCP-1 is produced by injured vascular smooth muscle cells and attracts the monocytes and macrophages which infiltrate the area, releasing growth factors and resulting in proliferation of vascular smooth muscle and restenosis. Nucleic acid molecules which are antisense to the MCP-1 mRNA may be used to inhibit translation of MCP-1 and so may be useful for inhibiting vascular restenosis, partic. following balloon angioplasty or a related process. The molecule may be radiolabelled to increase its therapeutic effect or for imaging areas of potential
                                                                                                                                                                                                                                                                         19-MAR 1998 (first entry)

Droll/2 chemokine betal0 or monocyte chemotactic protein 4 variant.

Human; chemokine betal0; Ck betal0; treatment; antagonist;

solid tumour; infection; autoimmune disease; asthma; antibody;

fibrotic disease; psoriasis; neurodegenerative disease;

wound healing; haematopolesis regulation; gene therapy;
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W09519167-A1.
asthma and fibrosis
Example 11; Fig 5; 83pp; English.
The present sequence is human chemokine beta10 monocyte chemotactic protein 4 (MCP-4) Drol1/2
                                                                                                                                                                                                                                                                                                                                                                           W22674 standard; Protein; 79 W22674;
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R86859 standard; Protein;
                                                                Polypeptide encoding chemokine beta protein 4 - useful to treat tumours,
                                                                                                                                                                                                                                             chromosome identification; monocyte chemotactic protein leukaemia; MCP-4; Droll/2 variant.
                                                                                                                                                                                                               WO9731098-A1.
                                                                                                                                                                                                                                Homo sapiens.
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WPI; 95-263703/34.
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Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 6; Conservative
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Best Local Similarity 100.0%;
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23-FEB-1996;
23-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bac 1 chemokine beta10 or monocyte chemotactic protein 4 variant. Human; chemokine beta10; Ck beta10; treatment; antagonist; solid tumour; infection, autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopolesis regulation; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W22671;
19-MAR-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (HUMA-) HUMAN GENOME SCI INC. Adams M, Alderson R, Applebaum Parmelee D, White J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chromosome identification; monocyte chemotactic protein leukaemia; MCP-4; Bac 1 variant.
                                                                                                      Sequence
                                                                                                                             and for chromosome
                                                                                                                                                  be used to isolate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 97-435153/40
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₩0-002598
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                                                                                                    Α,
                                                                                                                           genes encoding identification
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Pred.
0; M
Score 44; DB 27;
Pred. No. 8.87e+01;
0; Mismatches 0
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No. 8.87e+01;
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PA (SMIK) SMITHKLINE BEECHAM CORP.

II. H. Pelus L. White JR;

DR WPI: 97-258956/23.

DR WPI: 97-258956/23.

PT en new chemokine(s) able to mobilise stem cells - used where

PT increased levels of haematopoietic cells are required, e.g. to

PT increased levels of haematopoietic cells are required, e.g. to

PT increase resistance to infection

PS Claim 7; Page 11-12; 24pp; English.

CC of mobilising stem cells. The chemokine can be used therapeutically to

CC improve stem cell mobilisation, optionally together with a colony

CC stimulating factor or other haematoregulatory agent. It can be used

CC wherever an increased level of haematopoietic cells is needed, e.g. to

CC increase the immune response to chronic infection (particularly

CC batterial or parasitic), to promote wound healing, in (transplant)

CC immunosuppressive treatment or disease, and to provide more rapid

CC immunosuppressive treatment or disease, and to provide more rapid

CC diseases. The induced stem cells may be harvested for subsequent return

CC to deliver a selected gene product (gene therapy). The cells may be

CC cradministered with a cytotoxic func
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches
.x-1995; US-480449.
(LCOS-) ICOS CORP.
Godiska R, Gray PW;
WPI; 98-008038/01.
N-PSDB; T99233.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W40811;
W40811;
01-APR-1998 (first entry)
01-APR-1998 (first entry)
Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy;
Macrophage-derived chemokine; MDC; antibody; binding modulator; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Stem cell mobilising chemokine CKbeta-10.

Haematopoietic cell; parasitic infection; colony stimulating factor; haematorgulator; immune response; bacterial infection; transplant; wound healing; bone marrow; immunosuppression; regeneration; meoplastic disease; viral disease; gene therapy; cytotoxic drug.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /T 26
W17665 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                              US5688927-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Protein
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24-OCT-1995; US-006051.
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Local Similarity 100.0%;
nes 6; Conservative
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25..93
/note=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "leader peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                      "mature protein"
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Pred. No. 8.87e+01;
0; Mismatches 0
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RESULT ACCORDED TO SERVING COLOR COL
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Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                             W07604 shows human chemokine beta-13 (Ck-beta-13), a member of the C-C (Cys-Cys) branch of intercrine chemokines. Ck-beta-13 is useful for treating patients lacking chemokine beta-13 by gene therapy. Ck-beta-13 stimulates the invasion and activation of host defence cells making it useful for treating solid tumours, e.g. Kaposi's sarcoma, and for enhancing resistance to acute and cronic infections, e.g. mycobacterial infections. The chemokine induces chemotactic migration of monocytes, neutrophils, eosinophils, T lymphocytes, basophils and fibroblasts to sites where they are needed. Eosinophils may be attracted to the site of a parasitic infection to kill parasite larvae. Ck-beta-13 also recruits debris-clearing and connective tissue promoting inflammatory cells, and is therefore used to stimulate wound healing, prevent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antibodies specific for macrophage-derived chemokine - useful for purifying or detecting the chemokine or modulating its activity Claim 3: Column 21-24; 22pp; English.

This sequence represents the macrophage-derived chemokine (MDC). This protein is used to produce the antibodies of the invention. The antibodies are useful for purifying MDC polypeptides, for detecting endogenous MDC in a host, and for modulating binding of MDC to its receptors. The DNA encoding this sequence can be used for identifying and isolating non-human MDC homologues. The MDC protein is potentially useful for treating inflammatory disorders, cancer, etc. Antagonists of MDC can be used for treating Crohn's disease, arthritis, atherosclerosis etc.
                                                                                                    chemokine which is useful for treating certain autoimmune diseases, atherosclerosis, chronic inflammatory and infective diseases, allergic reactions, rheumatoid arthritis, silicosis and bone marrow failure. Sequence 93 AA;
                                                                                                                                                                                                                               scarring and treat liver cirrhosis, osteoarthritis and pulmonary fibrosis. Ck-beta-13 may also be used for treating leukaemia, T-cell mediated autoimmune diseases, psoriasis, to regulate haematopoiesis and to inhibit angiogenesis. Ck-beta-13 antagonists inhibit activity of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cytokine beta-13 stimulates migration/activation of immune cells. Chemokine beta 13; Ck-beta-13; C-C; Cys-Cys subfamily; immune cell; defence; activation; eosinophil; monocyte; macrophage; T lymphocyte; T cell; basophil; gene therapy; tumour; cancer; neoplasia; infection. Kaposi's sarcoma; cirrhosis; osteoarthritis; pulmonary fibrosis; leukaemia; autoimmune disease; psoriasis; inflammation; allergy; rheumatoid arthritis; silicosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human chemokine beta-13 - useful for treating solid tumours, Leukaemia, infections, autoimmune disease, fibrotic disorders, psoriasis, etc.
Claim 10; Page 46; 58pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 97-043143/04.
N-PSDB; T44026.
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(SMIK ) SMITHKLINE BEECHAM CORP.
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100.0%;
Score 44;
Pred. No.
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Pred. No. 8.87e+01;
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                                DB 23;
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8.87e+01;

Length

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Best Local S
Matches
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07-JUN-1995; US-479650.
16-NOV-1995; US-58858.
(ICOS-) ICOS CORP.
GOdiska R, Gray PW;
WPI; 97-052324/05.
N-PSDB; T76529.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (Cys-Cys) subfamily of cytokines has been isolated. MDC and it's analogues may be used in the treatment of inflammatory diseases especially diseases characterised by monocyte chemotaxis towards a site of inflammation. MDC and it's analogues also induce fibroblast proliferation having a positive effect in wound healing and angiogenesis. They may prove to be clinically important in the treatment of tumours, by directly or indirectly inhibiting tumour formation. Antibodies directed against MDC and its analogues may be used in the treatment of Crohn's disease, rheumatoid arthritis and atherosclerosis. Probes and/or primers for the identification of MDC encoding sequences 33 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Macrophage derived chemokine (MDC) and analogues - used in the treatment of inflammatory diseases, MDC antibodies used to the Crohn's disease, rheumatoid arthritis, etc. Claim 1, Page 73; 106pp; English.

A new macrophage derived chemokine, MDC, a member of the C-C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              W20058, W20058,
                                                                                                                                                                                                                              Monocyte chemotactic protein 5.
MCP-5; human; macrophage; chemokine; inhibitor; antiinflammatory; atherosclerosis;
                                                  Protein
                                                                                                                              Key
                                                                                                                                                        Homo
                                                                                                                                                                                                      Crohn's disease; arthritis;
                                                                                                                                                                                                                                                                                                                                         W30191 standard; Protein; W30191;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Macrophage derived chemokine for treating inflammation.
MDC; macrophage derived chemokine; C-C; Cys-Cys; Crohn's disease; rheumatoid arthritis; chemotaxis; fibroblast proliferation;
                                                                                                                                                                                therapy;
                                                                                                                                                                                                                                                                                                            21-MAY-1998 (first entry)
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                                                                                                   Peptide
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Local Similarity 100.0%;
nes 6; Conservative
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                                                                                                                                                                              diagnosis; medical
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                                                                                                                           Location/Qualifiers
                        /label= Mat_protein
                                                                           /label=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 44;
Pred. No.
0; Misma
                                                                                                                                                                           imaging.
                                                                                                                                                                                                      angiogenesis;
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8.87e+01;
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RESULTIAN ACCOMMENS OF THE PROPERTY PRO
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Claim 1; Page 36-37; 47pp; English.

CThis polypeptide comprises human macrophage-derived components of the more components of the moneyte chemotactic protein-5 (MCP-5), a novel C-C chemokine.

CC Its amino acid sequence was deduced from a cDNA clone (see T90880 and T90883) isolated from a human macrophage cDNA clibrary. A claimed method for producing MCP-5 comprises culturing a host cell that is stably transformed or transfected components.

CC with MCP-5 polynucleotide. Also claimed is a hybridoma that produces a monoclonal antibody (MAb) that is specifically reactive with the mature MCP-5. MCP-5 (or its analogues and fragments) is used to enhance the immune response in cases of cuseful as anti-inflammatories in cases of e.g. arthritis and components and tumour growth (or metastasis). The MCP-5 anifolitors can possibly also be used to reduce the damaging effects of chemo- and radio-therapy on myeloid progenitor cells, and to inhibit replication of HIV. MCP-5 can also to the analogues or receptors) are used to modulate MCP-5 activity and to identify the mCP-5 activity and to identify and analogues or set the modulate MCP-5 activity and to identify the mo
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Best Local :
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26-MAR-1997; U04898.
27-MAR-1996; US-622851.
(ICOS-) ICOS CORP.
Godíska R, Gray PW;
WPI; 97-489645/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-MAR-1998 (first entry)
Human chemokine betal0 or monocyte chemotactic protein 4.
Human; chemokine betal0; Ck betal0; treatment; antagonist;
solid tumour; infection; autoimmune disease; asthma; antibody;
fibrotic disease; psoriasis; neurodegenerative disease;
wound healing; haematopoiesis regulation; gene therapy;
chromosome identification; monocyte chemotactic protein 4;
Polypeptide encoding chemokine beta protein 4 - useful to treat tumours, asthma and fibrosis Claim 1; Fig 2; 83pp; English.
                                                                                                                                                                                                           23-FEB-1996; U02598.
23-FEB-1996; WO-U02598.
(HUMA-) HUMAN GENOME SCI INC.
Adams M. Alderson R. Applebaum
Parmelee D. White J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      leukaemia; MCP-4.
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19-MAR-1998
                                                                                                                                                N-PSDB; T85029
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23-FEB-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N-PSDB; T90880.
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larity 100.0%;
Conservative
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                                                                                                chemokine beta 4 and monocyte chemotactic
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Pred. No. 8.87e+01;
0; Mismatches 0;
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                                                                      autoimmune disease, infection,
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                                                                                                                                                                     N. PSDB; 717050.

N. PSDB; 717050.

PT New Chemokine Ck(beta)-4 and -10 genes and polypeptide(s) - useful for treat, e.g. leukaemia, solid tumours and auto-immune diseases ps Claim 19; Fig 2; 53pp; English.

CC A novel human chemokine, Ck beta-10 (R93087), was identified as CC the product of a cDNA clone (T17050) isolated from a 9-wk early the product of a cDNA clone (T17050) isolated from a 9-wk early to the chemokine family. Recombinant Ck beta-10 can be obtd. by CC incorporating the cDNA into a vector and expression of the protein CC in e.g. E. coll, COS or Sf9 cells. Ck beta-10 can be used to treat colld tumours, chronic infections, psoriasis, asthma and allergy, CC angiogenesis. It can also be used to inhibit bone marrow stem cell
                                Query Match
Best Local :
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Best Local Similarity 100.0%;
Matches 6; Conservative
      Matches
                                                                                                                           angiogenesis.
colony formn. o
Sequence 98 l
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23-AUG-1994;
23-AUG-1994;
08-SEP-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (HUMA-) HUMAN GENOME Adams MD, L1 H;
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be used to isolate
and for chromosome
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4), which can be used to treat patients deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10. Ck beta10 can be used to reduce excessive levels of Ck beta10. Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  peptide
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y Match 100.0%;
Local Similarity 100.0%;
nes 6; Conservative
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Score 44; DB 17;
Pred. No. 8.87e+01;
0; Mismatches 0
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Pred. No. 8.87e+01
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                                                             Length 98;
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   Indels
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Sequence
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27-APR-1992; J00550.
09-MAY-1991; JP-135950.
(DAIN ) DAINIPPON PHARM CO LTD.
FUKUI T, Matsuo N, Yamada M, Yamagishi J;
WPI: 92-398864/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LT 34
R28663 standard; Protein;
R28663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Purified heparanases, prepared under reducing conditions and activated with transglutaminase, are given in R70786-804. Most are prepared by reverse transcription of mRNA from activated human leukocytes, then cloning of the cDNA into pVL1392 baculovirus vector, and expression in Sf9 cells in the presence of reduced glutathione and dithiothreitol.
                                                                                                                                                                                                                                                 An expression of 76 amino ac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Screening for cpds. with anti-heparanase activity - by inhibition of heparin or heparan sulphate degradation, potentially useful for treating arthritis, restenosis, Claim 13; Page 49; 60pp; English.
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26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
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                                                                                                                                                                                                                                                                                                                                                                                            E.coli strains
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WO9504158-A.
                                                                                                                                                                                                                                                                                                                                               Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-PSDB; Q30748.
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                                                                                                                                               amino acids was constructed. DNA of the control of the contro
                                                                                                                                                                                                     ins
Page 43-44; 56pp; English.
on plasmid, pHMC076 for producing MCF(76) consisting
on plasmid, pHMC076 for producing MCF(76) was
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No. 8.87e+01;
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8.87e+01;
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25-JUL-1989;
30-MAR-1989; US-330446.
30-MAR-1989; US-330446.
(USSH) US Dept. Health and H
Yoshimura T, Robinson EA, Ap
WPI, 89-300683/41.
Human derived monocyte chemo-attractant peptide prods. - obtd. from human glioma cell line U-105MG or peripheral blood mononuclear leukocytes. Disclosure; fig 2; 66pp; English.

This is a human-derived monoyte chemo-attractant peptide (MCP-1) sequence MCP-1 exhibits optimal chemotactic activity at a concn. of InM and has a mol. mass of c.a. 8,400 D. MCP-1 can be used for treating infection eg inflammatory disease, or for the control of neoplasms by accumulation of monocytes at the site of the infection. The corresp. DNA is obtd. by chemical synthesis, by screening reverse trascripts of mRNA from purified blood leukocytes or cell cultures of eg U-373 MG or KMG-5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JT 36
P95387 standard; protein;
P95387;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         screening for cpds. with anti-heparanase activity - by detecti inhibition of heparin or heparan sulphate degradation, potentially useful for treating arthritis, restenosis, cancer. Claim 13; Page 50; 60pp; English.

Purified heparanases, prepared under reducing conditions and activated with transglutaminase, are given in R70786-801. Mos are prepared by reverse transcription of mRNA from activated heukocytes, then cloning of the cDNA into pVL1392 baculovirus vector, and expression in Sf9 cells in the presence of reduced glutathione and dithiothreitol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human monocyte
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Hoogwerf AJ, Ledb
WPI; 95-082239/11.
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29-AUG-1995
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29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
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chemo-attractant peptide; inflammatory
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Pred. No. 8.87e+01;
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Best Local Similarity 100.0%;
Matches 6; Conservative
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28-SEP-1993; US-127499.
(SHARV) SHARWA L R.
(VALS/) VAN ALSTYNE D.
Sharma LR, Van Alstyne D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               T 38
R24353 standard; Protein; 109
R24353;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New peptide(8) and corresp. antibodies for the treatment of meningitis - the peptide(s) corresp. to homologous antigenic sites on bacterial and viral agents and on chemokine(s), used for detecting and preventing meningitis claim 47; Fig 8/10; 98pp; English.

R73914 is the chemokine Human monocyte chemoattractant factor hMCP-1. It contains the meningitis related antigenic sequences (MRHAS) claimed in R73895 and R73907, which are recognised by a monoclonal antibody from the hybridoma Rubella virus (RV)-1. The claimed MRHAS peptides may be used in immunoassays to diagnose the presence of bacterial and/or viral meningitis agents in a sample, or in prophylactic and therapeutic meningitis treatments. The peptides may also be used as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R/3914;
05-DEC-1995 (first entry)
Human monocyte chemoattractant factor hMCP-1.
Human monocyte chemoattractant factor; hMCP-1; chemokine; vaccine;
Human monocyte chemoattractant factor; hMCP-1; chemokine; vaccine;
meningitis related homologous antigenic sequence; MRHAS; RV-1;
meningitis related homologous antigenic sequence; MRHAS; RV-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytokine encoded by clone NC28.
Cytokine; plasmid pSE1; HTLV-1; human T-lymphocyte virus; mouse; alpha-globin; E.coli cloning vector; ss.
    EP-488900-A.
                                                                                                                                                                    modified_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-NOV-1992 (first entry)
Cytokine encoded by clone
                                                                                                                                                                                                                                                                                                                                                                     peptide
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NB: Identified by matching c
Sequence 99 AA;
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                                                                                                                                                                                                                                           /label= signal
/note= "includes 3
34..109
                                                                                                                                                               /label= cytokine 39..41
                                                                           /label= N-glycosylation
/note= "putative"
                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 44; DB 14;
Pred. No. 8.87e+01;
0; Mismatches 0
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Pred. No. 8.87e+01
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A
                                                                                                                                                                                                                                                                                 potential initiation sites"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
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                                                                                                                                                                                      Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 6; Conservative
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Best Local Similarity 100.0%;
Matches 6; Conservative
                                                                                                                                                                                                                                                    Claim 14; Page 36-38; 54pp; English.

W1992 represents human calcium activated neutral protease (CANP).

This protein was found to have an area of high homology with an interleukin-1 receptor (IL-1-R) intracellular ligand (encoded by cDNA clone 14w, see T71218) and thus will display some of the same properties of this protein. IL-1-R intracellular ligand proteins are used to screen for agents (e.g. antibodies) that are capable of thibiting or blocking the binding of an IL-1-R intracellular ligand to the intracellular domain of IL-1-R, i.e. inhibitors of IL-1 activity. Such agents can be used to treat inflammatory conditions. Sequence 700 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-DEC-1996.
06-MAY-1996; U06363.
07-JUN-1995; US-487942.
07-JUN-1995; US-487942.
(GEMY ) GENETICS INST INC.
Graham J, Lin L;
WPI; 97-052315/05.
Interleukin-1 receptor intracellular ligand proteins and related rused to identify inhibitors of the proteins for treatment of
W44721 standard; Protein; 82
W44721;
05-JUN-1998 (first entry)
Amino acid sequence of the se
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-AUG-1997 (first entry)
Human Carle used to identify inhibitors of interleukin-1 activity.
IL; interleukin; receptor; ligand; screening assay; inhibitor;
IL-1 mediated response; inflammation; inflammatory; antibody; intracellular domain; CANP; calcium activated neutral protease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Fig 2; 45pp; French.

This protein is encoded by the NC28 clone isolated from peripheral blood mononuclear cells stimulated with phorbol 2-myristate-3-acetate (see Q25259). The mature protein is claimed. It can be N-terminally deleted such that the mature protein starts at Val 3 or at Lys 19. The leader sequence is active in animal cells. See Q25258-Q25262.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ERAP ) ELF SANOFI.
(SNFI ) SANOFI SA.
Caput D, Ferrara P, Miloux B, Minty A,
WPI: 92-185765/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
W09640907-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New monocyte chemo:attractive of and parasitic infections, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-NOV-1991; 403243.
29-NOV-1990; FR-014961.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  inflammation
                                                                                                                                        80 eicadp 85
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                                                                                                                    1 EICADP
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                                                                                                                                                                                      Score 44; DB 23; Le Pred. No. 8.87e+01; 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 44; DB 2; Length 109 Pred. No. 8.87e+01; 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytokine - for treatment of cancer leishmaniasis, leprosy or Chagas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Vita
                                                                                                                                                                                                                    Length 700;
                                                                                                                                                                                      Indels
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protein encoded by clone AM262_11.

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Best Local
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                                                                                                                                                                                                                                                  01-OCT-1996; J02851.
28-FEB-1995; JP-041965.
05-OCT-1995; JP-259067.
(SHIO ) SHIONOGI & CO LTD.
Harada S, Kitaura M, Nakajima T
WPI; 97-228168/20.
N-PSDB; T62944.
inflammation
Claim 2: Pages 27-28; 45pp; Japanese.
Claim 2: Pages 27-28; 45pp; Japanese.
The present sequence is the human eosinocyte, CC type
chemokine, eotaxin, which increases calcium flux in human
eosinocytes and is a human analogue of guinea pig eotaxin. The
eotaxin was derived from human small intestine, and is a specific
agonist for human CC type chemokine receptor 3. It may be useful as
screen potential agonists and antagonists, which may be useful as
anti-inflammatories. An anti-eotaxin antibody may be used in
diagnostic assays for eotaxin, which is implicated in inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                          Human; eosinocyte; CC type; chemokine; eotaxin; calcium; skin; small intestine; agonist; screening; antagonist; inflammation; antibody; diagnosis; assay; disorder; asthma; allergy; atopic.
                                                                                                                                                                                                                                                                                                                                                                                                                                            01-DEC-1997 (first entry)
Human eosinocyte CC type chemokine eotaxin.
Human; eosinocyte; CC type; chemokine; eota
small intestine; agonist; screening; antago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                secreted protein encoded by clone AMZ82_11. The clone was isolated from a human fetal kidney cDNA library using probe V05756. AMZ62_11 has some identity with the human eotaxin precursor gene and protein. As such, the AMZ62_11 protein may share some activity. The nucleic acid can be used for expression of recombinant proteins, as tissue, molecular weight or chromosome markers, indicators of genetic disorders and sources of probes and primers. They can also be used to generate anti-protein or anti-DNA antibodies and as components of interaction immunoassay reagents and as nutritional supplements. The protein may possibly have any of a great variety of therapeutic activities. Sequence 82 AA;
                                                                                                                                                                                                             Human CC chemokine (eotaxin) active on eosinocytes - useful for screening for eotaxin (ant)agonist(s), e.g. for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W14990 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
W09712914-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          W14990;
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The present sequence represents the amino acid sequence of a present sequence represents the amino acid sequence.
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BOWMEN M. EVENS C. Jacobs K, Lavallie ER, McCly
Merberg D. Racie LA, Spaulding V, Treacy M;

WPI: 98-042191/04.
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07-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97.7%;
83.3%;
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Pred.
1; N
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No. 1.14e+02;
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DR N-F5DB; 758777.

DR N-F5DB; 758777.

PT New isolated human ectaxin gene - used to develop prods. for the prodict of the prodict of the prodict of the prodict of the products of the present sequence is human ectaxin (hE), an eosinophil CC claim 3; Pages 95-96; 130pp; English.

CC The present sequence is human ectaxin (hE), an eosinophil cocumulation and/or attracting eosinophils (including chemotaxis). CC claim 5; Pages 95-96; 130pp; English.

CC It can be used to develop products for the diagnosis, prevention or CC treatment of hE associated diseases or conditions. The products can be used to treat inflammatory or allergic diseases and conditions, compared to treat inflammatory or allergic diseases and conditions. CC including respiratory allergic diseases (e.g. asthma, allergic crimitis, hypersensitivity lung diseases or pneumonitis, coesinophilic pneumonia, interstitial lung diseases (ILD) such as CC eosinophilic pneumonia, interstitial lung diseases (ILD) such as CC diopathic pulmonary fibrosis or ILD associated with rheumatoid condititis, systemic such as cythematosus (SLE), ankylosing spondylitis, systemic sucherosis, Sjorgen's syndrome, polymyositis or rdermatomyositis, systemic anabhylaxis or hypersensitivity
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KW accumulation; attraction; chemotaxis; diagnosis; prevention;

KW treatment; disease; inflammation; allergy; asthma; rhinitis;

KW treatment; disease; inflammation; allergy; asthma; rhinitis;

KW hypersensitivity; lung; pneumonia; Loeffler's; syndrome;

KW interstitial; ILD; idiopathic pulmonary fibrosis;

KW rheumatoid arthritis; systemic; lupus erythematosus; SLE;

KW ankylosing spondylitis; systemic; lupus erythematosus; SLE;

KW dermatomyositis; bowel; anaphylaxis; drug; penicillin;

KW dermatomyositis; bowel; anaphylaxis; drug; penicillin;

KW dermatomyositis; bowel; anaphylaxis; drug; penicillin;

KW dermatomyositis; cleroderma; psoriasis; dermatosis;

KW wasculitis; eczema; atopic; urticaria; necrotising; cutaneous;

KW dermatitis; myositis; fascitis; multiple sclerosis;

KW wasculitis; myositis; fascitis; multiple sclerosis;

KW wasculitis; myositis; Bechet's; graft; rejection;

KW autoimmune; thyroiditis; Bechet's; graft; rejection;

KW transplantation; reperfusion injury; atherosclerosis;

KW belkocyte infiltration; reperfusion injury; atherosclerosis;

KW hematologic malignancy; septic; endotoxic; shock;

M polymyositis; dermatomyositis; immunosepression; immunodeficiency;

KW bolymyositis; dermatomyositis; immunospression; immunodeficiency;
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Best Local Similarity
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21-JUN-1996; US-494093.
23-JUN-1995; US-494093.
(LEUK-) LEUKOSITE INC.
MacKay C, Newman W, Po
                 or dermatomyositis), systemic anaphylaxis or hypersensitivity
responses, drug allergies (e.g. to penicillin and cephalosporins),
insect sting allergies, inflammatory bowel diseases (e.g. Crohn's
disease and ulcerative colitis), spondyloarthropathies,
scleroderma, psoriasis and inflammatory dermatoses (e.g.
dermatitis, eczema, atopic dermatitis, allergic contact dermatitis
urticaria and necrotising, cutaneous and hypersensitivity
vasculitis), eosinophilic myositis and fascitis, multiple
sclerosis, SEE, myasthenia gravis, juvenile onset diabetes,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens. W09700960-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     therapy; chemotherapy; autoimmune; corticosteroid;
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Pred. No. 1.14e+02;
thyroiditis,
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Bechet's
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                                                                                                                                                                              Query Match
Best Local
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Best Local
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(INCY-) INCYTE PHARM INC
Bandman O, Coleman R,
WPI; 96-393398/39.
N-PSDB; T33527.
 R38940 standard;
R38940;
23-NOV-1993 (fir
                                                                                                                                                                                                                         Nucleotide and protein sequences for human PANEC-1 and PANEC-2 - useful in diagnosis and therapy of pancreatic diseases Claim 8; Paage 28-29; 43pp; English.

The sequences given in W00667-68 represent pancreas-derived chemokir PANEC-1 and PANEC-2. These chemokines are highly expressed and specifically expressed in the pancreas and may therefore be used in diagnostic assays based on chemokine production in cases of inflammation or disease affecting the pancreas. These assays allow the early and accurate diagnosts of pancreatic disorders, and can differentiate between invasive diseases and genetic syndromes.
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Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens. wo9625497-A1.
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Pancreas-derived chemokine; PANEC-1; PANEC-2; diagnosis;
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17-FEB-1995; US-390
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W00667 standard; Protein; 97 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              inflammation; disease; cancer.
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ilarity 83.3%;
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                                  Protein;
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Pred.
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No.
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Best Local S
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Example 15; Page 55; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with
Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha
analogues correspond to the pref. LD78 analogues.
                                                                                                          providing better tissue penetration
Example 1; Page 48-50; 294pp; English.
Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.
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Protein with stem cell inhibition activity, e.g. LD78 or MlP-1 alpha, unable to form stable multimer higher than dodecamer,
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23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards F
                           Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha analogues correspond to the pref. LD78 analogues.
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macrophage inflammatory pro
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hunter MG;
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WPI; 93-227322/28.
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23-DEC-1991; GB-027319.
23-DEC-1991; GB-027587.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
CTA19 S, CZaplewski LG, Edwards F
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protein; multimer; tumour therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         69
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Pred. No.
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1.46e+02;
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IRESULTING ACCORDANCE TO THE SULTING ACCORDA
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Best Local S
Matches
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15-JUL-1997; U12349.
15-JUL-1996; US-683655.
(INCY-) INCYTE PHARM INC.
Aur Young J. Coleman R, Hillman JL;
WPI, 98-110529/10.
N-PSDB; V09218.
New human monocyte chemotactic proprotein - has homology to CC chemokine(s) useful for identifying agent for treating auto-immune diseases or allergic responses Claim 1; Pages 38-39; S3pp; English.

The is a human monocyte chemotactic proprotein sequence. Its cDNA was first identified in Incyte clone 96517 from a breast cDNA library. Antisense nucleotides can be used to control human MCPP expression especially where it may lead to inappropriate monocyte or macrophage activity causing damage associated with allergic responses to organs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human MC proprotein:
Human monocyte chemotactic proprotein; MCCP; Incyte clone; allergy;
macrophage; diagnostic assay; body fluid; lung; biopsy;
autoimmune disease; AIDS; asthma; rheumatoid arthritis; NIDDM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T 47
W42072 standard; Protein; 109
W42072;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Screening for cpds. with anti-heparanase activity - by detecting inhibition of heparin or heparan sulphate degradation, potentially useful for treating arthritis, restenosis, cancer. Claim 13; Page 53; 60pp; English.
Purified heparanases, prepared under reducing conditions and activated with transglutaminase, are given in R70786-804. Most are prepared by reverse transcription of mRNA from activated human leukcoytes, then cloning of the cDNA into pVL1392 baculovirus vector, and expression in Sf9 cells in the presence of reduced glutathione and dithiothreitol.
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26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
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Chemoattractant MCP-2,
Chemoattractant, MCP-2, heparanase; heparin; heparan sulfate;
arthritis; restenosis; cancer; wound healing.
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Hoogwerf AJ, Ledbetter
WPI; 95-082239/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09802459-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     breast cancer; bladder.
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Pred. No.
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Pred. No. 1.46e+02;
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                                                                                                                                                                                                                                                                                   MCP-2. Its sequence was deduced from a claimed cDNA clone (see T91023) isolated from a human peripheral blood mononuclear cell cDNA library. Also claimed are: (1) a host cell, preferably mammalian, transformed with a H1306 polynuclectide operably linked to an expression control sequence; (2) a recombinantly produced to an expression control sequence; (3) a recombinantly produced thi305 protein; and (3) a composition comprising an antibody which specifically reacts with the H1305 protein. The H1305 protein may be used in a composition for the treatment of a mammalian subject (claimed). It is thought to have chemokine activities and may therefore have an effect on chemotaxis or migration of blood cells. It may be useful for inhibiting viral replication, including replication of HIV, and may also be used for treatment of wounds and to raise monoclonal and polyclonal antibodies which specifically react with H1305. Such antibodies may be used for therapy of certain tumours as they are capable of blocking the ligand binding of the H1305 protein or may promote clearance of the protein from the patient.
                                                                                                                                                                                                                         Query Match
Best Local
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W26655
                                                 W23643;
08-JAN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New human beta-chemokine, H130 treatment of viral infection, Claim 1; Page 12-13; 21pp; Eng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 H1305; MCP-2; chemokine; human; chemoattractant; chemotaxis; virus infection; HIV; therapy; wound healing; tumour; antibody.
                                                                               W23643 standard; Protein;
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WO9725427-A1.
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Human beta-chemokine H1305 (MCP-2).
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Similarity 83.3%;
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Pred. No.
1; Misma
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Pred. No. 1.46e+02;
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1.46e+02;
-~hes 0;
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Human dendritic cell tactin.
Human dendritic cell tactin; DC
haematopoietic cell; rheumatoid

tactin; C-C chemokine arthritis; psoriasis;

psoriasis; atopic

family;

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IDENTITION ACCURATE SULTATION ACCURATE SULTATION ACCURATE SUBJECT OF THE SULTATION ACCURATE SULTATION ACCURATE SULTATION ACCURATE SULTATION AC
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Best Local Similarity
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29-JUN-1995.
28-JUN-1994;
22-DEC-1993;
08-MAR-1994;
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This is the sequence of human dendritic cell (DC) tactin, a new member of the C-C chemokine family. DC tactin is a chemokine which attracts or activates haematopoietic cells and possibly also neural cells. Antagonists of the chemokine, such as antibodies, are used to regulate and/or prevent autoimmunity, tissue rejection and undesired response to antigens (e.g. in cases of rheumatoid arthritis, psoriasis, atopic dermatitis, asthma etc.), while agonists (such as DC tactin itself) are used to regulate and/or treat infectious disease, response or cancer, by attracting haematopoietic cells to dendritic cells, also as vaccine adjuvant for immunocompromised subjects. The cDNA encoding DC tactin is useful in gene therapy and generation of transgenic
                                          cDNA encoding human macrophage inflammatory proteins -3, -4 and -1-gamma - used in immuno-regulation includding inflammatory activity, haematopolesis, treatment of psoriasis or solid tumour Claim 12; Figure 2; 60pp; English.

Human macrophage inflammatory protein-4 (MIP-4) is used in therapeutic and diagnostic applications for detecting and treating infections, cancer, inflammation, myelopoletic
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R76127 standard; Protein;
R76127;
02-DEC-1995 (first entry)
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Primate dendritic cell tactin, a chemo-attractant for haematopoietic cells - useful for diagnosis and treatment of e.g. auto-immune
                                                                                                                                                                                                                                                                 Adams MD, Li H, WPI; 95-240404/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Macrophage inflammatory protein-4.
Macrophage inflammatory protein-4; therapeutic; diagnostic
                                                                                                                                                                                                                                           N-PSDB; Q94093
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06-FEB-1997; U01247.
09-FEB-1996; US-5992
                                                                                                                                                                                                                                                                                          (HUMA-) HUMAN GENOME SCI INC. Adams MD, Li H, Rosen CA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               peptide
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Key
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1 EICADP 6
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/note= "predicted"
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Pred. No. 1.88e+02;
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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Thu Apr 1 07:29:48 1999; MasPar time 3.02 Seconds 74.507 Million cell updates/sec

Tabular output not generated.

Description: Perfect Score: Sequence: Title: >US-08-927-939-8 (1-6) from US08927939.pep 44 1 EICADP 6

Scoring table: PAM 150 Gap 15

Searched: 116738 seqs, 37463448 residues

Post-processing: Minimum Match 0% Listing first 100 summaries

Database: pir58 1:pir1 2:pir2 3:pir3 4:pir4

Statistics: Mean 18.638; Variance 24.588; scale 0.758

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		þ			SUMMARIES		
Result No.	Score	Query Match	Length	DB	ID	Description	Pred. No.
1	44	100.0	99	ນ ¦	A60299	monocyte chemoattract	6.98e+00
N	44	100.0	109	N	A54678		6.98e+00
ω	44	100.0	148	N	S07723		6.98e+00
4	44	•	700	<b></b>	CIHUH2	•	
U	44		700	N	S38361	(EC 3.4.22.	
σι	43	97.7	97	N	JC4912	- human	
7	43	•	99	N	JC2136	monocyte chemoattract	1.12e+01
80	42	•	64	N	F69231	hypothetical protein	1.77e+01
9	42	•	99	N	JC5295	monocyte chemotactic	1.77e+01
10	42	•	99	N	JC2417		1.77e+01
11	42	•	120	N	148147	chemoatt	1.77e+01
12	42	95.5	148	N	A30209	PDGF-inducible JE gly	1.77e+01
13	41	٠	92	N	I52322	macrophage inflammato	2.80e+01
14	41	•	906	Ŋ	G69531	alanyl-tRNA synthetas	2.80e+01
15	40	•	283	N	JC5579	chymotrypsin-like ser	4.39e+01
16	40	•	360	N	S49188		4.39e+01
17	40	٠	552	N	A70709	probable ptrBa protei	4.39e+01
18	39	•	50	N	C60407	monocyte adherence-in	6.83e+01
19	39	٠	92	N	A30574	macrophage inflammato	6.83e+01
20	39		92	$\vdash$	A31767	macrophage inflammato	6.83e+01
21	39	•	93	N	B35673		٠
22	39	88.6	99	N	A39296	monocyte chemoattract	6.83e+01
23	39	•	99	2	JC2336	monocyte chemoattract	6.83e+01

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                                                                                                                                                                                                                                                                                                                                                                                                                                          #authors Yoshimura, T.; Leonard, E.J.
#Journal Adv. Exp. Med. Biol. (1991) 305:47-56
#Litle Human monocyte chemoattractant protein-1 (MCP-1).
#cross-references_MJID:92095166
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##molecule_type mRNA
##residues 1-99 ##label ROL
##residues GB:M30816; GB:M31625; GB:M31626; NID:g188701;
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                                 Int. J. Cancer (1990) 45:795-797
A chemoattractant expressed in human
(tumor-derived chemotactic factor,
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Human monocyte chemoattractant protein-1 (MCP-1). Full-length CDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE.
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The human homolog of the JE gene encodes a monocyte secretory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A35474
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Biochem. Biophys. Res. Commun. (1990) 169:346-351
Structure of human monocyte chemotactic protein gene
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ractant expressed in human sarcoma cells erived chemotactic factor, TDCF) is identical to chemoattractant protein-l/monocyte chemotactic and contractic and contracting the contraction of the contraction 
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                                                                                                                                                                                       Nobili, N.; Mantovani,
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#title The expression of monocyte chemotactic protein (MCP-1) in human vascular endothelium in vitro and in vivo.
#cross-references MUID:94150478
#accession 157488
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#title Identification of the monocyte chemotactic protein
osteosarcoma cells and monocytes: detection of a
N-terminally processed form.
#cross-references_MUID:90211336
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#title Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF).
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Molecular cloning of MCP-3: a human monocyte-derived monocyte
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monocyte chemotactic protein 3 precursor
monocyte chemotatractant protein MCP-3
#formal_name Homo sapiens #common_name man
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome 1/q11.2-q12.
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#product monocyte chemotactic protein 3 #status
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                   Score 44; DB 2; 1
Pred. No. 6.98e+00;
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Best Local Similarity 100.0%;
Matches 6; Conservative
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#accession $07723
#cross-references MUID:90380278
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#accession JN0128
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##cross-references GB:M57441; NID:g205333; PID:g205334
##experimental_source spleen cells
#heauthors translated the codon GAA for
##note Lys and GCT for residue 63 as Leu
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##residues 1-148 ##label TIM
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calpain (EC 3.4.22.1) large chain 2 - human
requiring, calcium activated neutral proteinase (CANP)
large subunit; m-calpain (millimolar) heavy chain
#formal_name Homo sapiens #common_name man
21-Nov-1993 #sequence_revision 09-Aug-1997 #text_change
02-Sep-1997
02-Sep-1997
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#status predicted #label MAT
#length 148 #molecular-waiah
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Biochem. Biophys. Res. Commun. (1991) 174:504-509
Molecular cloning of rat monocyte chemoattractant protein-1
(MCP-1) and its expression in rat spleen cells and tumor
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#formal_name Rattus norvegicus #common_name Norway rat
29-Jan-1993 #sequence_revision 29-Jan-1993 #text_change
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                                  T.C.; Ohno, S.; Minami, Y.; Suzuki, K. Biol. Chem. Hoppe-Seyler (1990) 371[Suppl.]:171-176 A novel member of the calcium-dependent cysteine pro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            *superfamily macrophage inflammatory protein
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Analysis of the rat JE gene promoter identifies an AP-I binding site essential for basal expression but not f
                                                                                                  Sorimachi, H.; Ohmi, S.; Emori, Y.;
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Best Local :
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#journal J. Biol. Chem. (1989) 264:6404-6411
Tandemly reiterated negative enhancer-like elements regulate transcription of a human gene for the large subunit of calcium-dependent protease.
#cross-references MUID:89197947
#accession A33529
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#title Molecular cloning of the CDNA for the large subunit of high-Ca(2+)-requiring form of human Ca(2+)-activated neutral protease.
#cross-references_MUID:89166474
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##residues 1-210,'I',212-394,'D',396-445,'I',447-700 ##label
##cross-references GB:M23254; NID:g511636; PID:g511637
##cross-references of this sequence were determined by protein
sequencing; the amino end of the mature protein
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#residues 1-67,'G',69-72,'IE',75-78,'R' ##label
##cross-references DDbJ:J04700; NID:g179910; PID:g4630
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Local Similarity 100.0%;
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                                                 #formal_name Rattus norvegicus
31-Dec-1993 #sequence_revision
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                                     08-Sep-1997
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#domain calmodulin repeat homology #label EFO\
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th 700 #molecular-weight 80020 #checksum 8484
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##residues 380-439 ##label SAM
##cross-references EMBL:X51772
#FICATION #superfamily calpain large chain; calmodulin repeat homology;
calpain catalytic domain homology
RDS calcium binding; cysteine proteinase; duplication; EF hand;
heterodimer; hydrolase
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                                                                                                                                                                                                                                                                                                                                                           ##experimental_source dermal fibroblast
This protein has eosinophil specific chemotatic activity.
FICATION #superfamily macrophage inflammatory protein
DS fibroblast
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##residues 1-97 ##label BAR
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Similarity 100.0%;
6; Conservative
                                                                                                                                                    Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bartels, J.; Schlueter, C.; Richter, E.; Noso, N.; Kulke, Christophers, E.; Schroeder, J.M.
Biochem. Biophys. Res. Commun. (1996) 225:1045-1051
Human dermal fibroblasts express ectaxin: Molecular clonismRNA expression, and identification of ectaxin sequence
                                                                                                                                                                                                                                      #domain signal sequence #status predicted
#product eotaxin #status predicted #label
#length 97 #molecular-weight 10790 #checksum
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JC4912
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#domain calmodulin repeat homology #label EF3\
#domain calmodulin repeat homology #label EF3\
#domain calmodulin repeat homology #label EF4\
#active_site Cys, His, Asn #status predicted
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Pred. No.
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Pred. No. 1.12e+01
1; Mismatches
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24-99
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#title
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#cross-references MUID:98037514
#accession F69231
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##cross-references EMBL:X79416; NID:g872312; PID:g872313
IFICATION #superfamily macrophage inflammatory protein US glycoprotein
##molecule_type DNA
1-64 ##label MTH
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Local Similarity 83.3%;
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Dubols, J.; Aldredge, T.; Bashirzadeh, R.; Blakely, D.;
Cook, R.; Gilbert, K.; Harrison, D.; Hoang, L.; Keagle, P.;
Lumm, W.; Pothier, B.; Qiu, D.; Spadafora, R.; Vicalre, R.;
Wang, Y.; Wierzbowski, J.; Gibson, R.; Jiwani, N.; Caruso,
A.; Bush, D.; Safer, H.; Patwell, D.; Prabhakar, S.;
McDougall, S.; Shimer, G.; Goyal, A.; Pletrokovski, S.;
Church, G.M.; Daniels, C.J.; Mao, J.; Rice, P.; Noelling,
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submitted to the
S57498
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Biochem. Biophys. Res. Commun. (1994) 199:962-968

Porcine luteal cells express monocyte chemoattractant protein-1 (MCP-1): Analysis by polymerase chain rea
                                                                                                                                                                                                                                                                  Complete genome sequence of Methanobacterium thermoautotrophicum Delta H: functional analysis and
                                                                                                                                                                                                                                                                                                                                        J.; Reeve, J.N.
J. Bacteriol. (19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      hypothetical protein MTH983 - Methanobacterium thermoautotrophicum (strain Delta H) #formal_name Methanobacterium thermoautotrophicum 05-Dec-1997 #text_05-Dec-1997 #text_05-D
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#formal_name Sus scrofa domestica #common_name domestic pig
30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change
08-Sep-1997.
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                                                                                        preliminary; nucleic acid sequence translation not shown
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#product monocyte chemoattractant protein-1 #status
predicted #label MAT\
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P.; Van Aelst, I.; Van Damme, J.; Opdenakker, G.
Biochem. Biophys. Res. Commun. (1997) 231:726-730
Human monocyte chemotactic protein-2: cDNA cloning and
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                     #journal
#title
                                                                                                                                                 #authors Rollins, B.J.; Morrison, E.D.; Stiles, C.D.
#journal proc. Natl. Acad. Sci. U.S.A. (1988) 85:3738-3742
#title Cloning and expression of JE, a gene inducible by
platelet-derived growth factor and whose product
cytokine-like properties.
#cross-references MUID:88234501
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Local Similarity 83.3%;
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Kawahara, R.S.; Deuel, T.F.

J. Biol. Chem. (1989) 264:679-682

Platelet-dearived growth factor-inducible gene JE is of a family of small inducible genes related to pl
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PDGF-inducible JE glycoprotein precursor - mouse
#formal_name Mus musculus #common_name house mouse
01-Dec-1989 #sequence_revision 01-Dec-1989 #text_change
01-May-1998
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#length 120 #molecular-weight 13741 #checksum
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cDNA cloning of guinea pig monocyte chemoattractant
and expression of the recombinant protein.
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#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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                                                                                                       1-148 ##label ROL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        preliminary; translated from GB/EMBL/DDBJ
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predicted #label MAT
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Pred. No. 1.77e+01
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NID:g349820; PID:g349821
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1.77e+01;
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#cross-references MUID:95298037
#accession 152322
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ##cross-references EMBL:U22414; NID:g790632; PID:g790633
IFICATION #superfamily macrophage inflammatory protein
% #length 92 #molecular-weight 10335 #checksu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ##residues 1-148 ##label
##cross-references GB:J04467;
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Local Similarity 83.3%;
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26/1; 65/2
Klenk, H.P.; Clayton, R.A.; Tomb, J.F.; White, O.; Nelson, K.E.; Ketchum, K.A.; Dodson, R.J.; Gwinn, M.; Hickey, E.K.; Peterson, J.D.; Richardson, D.L.; Kerlavag, A.R.; Graham, D.E.; Kyrpides, N.C.; Fleischmann, R.D.; Quackenbush, J.; Lee, N.H.; Sutton, G.G.; Gill, S.; Kirkness, E.F.; Dougherty, B.A.; McKenny, K.; Adams, M.D.; Loftus, B.; Peterson, S.; Reich, C.I.; McNeil, L.K.; Badger, J.H.; Glodek, A.; Zhou, L.; Overbeek, R.; Gocayne, J.D.; Weldman, J.F.; McDonald, L.; Utterback, T.; Cotton, M.D.; Spriggs, T.; Artlach, P.; Kaine, B.P.; Sykes, S.M.; Sadow, P.W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   152322 #type complete
macrophage inflammatory protein-lalpha - rat
#formal_name Rattus norvegicus #common_name |
29-May-1998 #sequence_revision 29-May-1998 #1
                                                                                                                                                                                                                                                                                      G69531 *type complete
G101747: tRNA synthetase (alas) homolog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shi, M.M.; Godleski, J.J.; Paulauskis, J.D. Biochem. Biophys. Res. Commun. (1995) 211:289-295 Molecular cloning and posttranscriptional regulation macrophage inflammatory protein-1 alpha in alveolar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cytokine; glycoprotein
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05-Dec-1997 #sequence_revision 05-Dec-1997
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83.3%;
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Pred. No. 2.80e+01
1; Mismatches
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NID:g193488;
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29-May-1998 #text_change
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#checksum
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Best Local Similarity 83.3%;
Matches 5; Conservative
                                                                                                                                                                                                                                                      Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #title The complete genome sequence of the hyperthermophilic, sulfate-reducing archaeon Archaeoglobus fulgidus. #cross-references_MUID:98049343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #title
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##cross-references DDBJ:D86743
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                                                                                                                                                                                                                                          90.9%;
Local Similarity 50.0%;
hes 3; Conservation
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Biosci. Biotechnol. Biochem. (1997) 61:909-913
A gene homologous to the Streptomyces chymotrypsin-like
protease (SAM-P20) gene is tandemly located.
JC5579
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GTG
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#length 906 #molecular-weight 102536 #checksum 4232
#formal_name Azotobacter vinelandii
16-Feb-1995 #sequence_revision 12-May-1995 #text_change
08-Sep-1997
                                                     fixB protein
                                                                                   $49188 #type complete electron transfer flavoprotein alpha chain
                                                                                                                                                                                                                                                                                                                                                                                                                                hydrolase
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#formal_name Streptomyces albogriseolus
23-Sep-1997 #sequence_revision 23-Sep-1997 #text_change
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Nature (1997) 390:364-370
                                                                                                                                                                                                                                                                                                                                                                                                                                               #superfamily Streptomyces proteinase A; trypsin homology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             D'Andrea, K.P.; Bowman, C.; Fujii, C.; Garland, S.A.; Mason, T.M.; Olsen, G.J.; Fraser, C.M.; Smith, H.O.; C.R.; Venter, J.C.
                                                                      Azotobacter vinelandii
                                                                                                                                                                                                                                                                                                                   #domain signal sequence #status predicted #label SIG\
#product chymotrypsin-like serine proteinase #status
predicted #label MAT\
#active_site His, Asp, Ser #status predicted
#th 283 #molecular-weight 28418 #checksum 1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       authors translated the
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                                                                                                                                                                                                                                                                   Score 40; DB 2;
Pred. No. 4.39e+01
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Pred. No. 2.80e+01
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#authors

Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, D.; Gordon, S.V.; Eiglmeier, K.; Gas, S.; Barry III, C.E.; Tekaia, F.; Badcock, K.; Basham, D.; Brown, D.; Chillingworth, T.; Connor, R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Holroyd, S.; Hornsby, T.; Jagels, K.; Krogh, A.; McLean, J.; Moule, S.; Murphy, L.; Oliver, S.; Osborne, J.; Quail, M.A.; Rajandream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S.; Sqares, R.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G.

#journal Nature (1998) 393:537-544

#title Deciphering the biology of Mycobacterium tuberculosis from the complete genome sequence.
                                                     RESULT
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Best Local Similarity 66.7%;
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##cross-references EMBL:X65515; NID:g510483; PID:g510486
FEICATION #superfamily electron transfer flavoprotein a.

ADS electron transfer; flavoprotein
                                                                                                                                                                  312 EICEDP 317
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##cross-references GB:Z80226; GB:AL123456; NID:g3261638; PID:e266572;
PID:g1550660
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##residues 1-5
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Similarity 83.3%;
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submitted to the EMBL Data Library, Apri
Molecular cloning of fixA, fixB, fixC an
S49188
S49186
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17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change
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                                                                                                                                                                                                  Score 40; DB 2; L
Pred. No. 4.39e+01;
0; Mismatches 1
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Matches
                                                                                                                                  *authors Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.

#journal DNA Cell Biol. (1990) 9:589-602

#title Three human homologs of a murine gene encoding an #cross-references MUID:91103879

#accession A30412
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#journal
#title
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Martin, G.; Ladner, M.; Haskill, S.

#journal J. Immunol. (1990) 144:4434-4441

#title Monocyte adherence results in selective induction of novel genes sharing homology with mediators of inflammation and tissue repair.

#cross-references MUID:90257367

#accession C60407
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                                                                                                                                                                                                                                                                                                                                                             #journal J. Immunol. (1989) 142:1582-1590
#title Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of secreted factors.

#cross-references MUID:89140347
#accession A30574
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#cross-references MUID:90287155
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##residues 1-92 ##label 2IP
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Local Similarity 66.7%;
nes 4; Conservative
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#length 50 #checksum 9927
Obaru, K.; Fukuda, M.; Maeda, S.; Shimada, J. Biochem. (1986) 99:885-894 A cDNA clone used to study mRNA inducible lymphocytes by a tumor promoter.
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Pred. No. 6.83e+01
2; Mismatches
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21-92
#journal Proc. Natl. Acad. Sci. U.S.A. (1988) 85:9704-4
#title Identification, cloning, and characterization
activation gene.
#cross-references MUID:89071764
#accession A31767
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J. Biol. Chem. (1991) 266:17531-17536

The gene encoding the Act-2 cytokine. Genomic structure,

HTLV-I/tax responsiveness of 5' upstream sequences, an
chromosomal localization.

#cross-references_MVID:91373378
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#accession JH0319
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##experimental_source natural killer cell, strain CD
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##molecule_type mRNA
##residues 1-92 ##label OBA
                                                                                                                                                                           ##note
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#residues 1-14,'S',16-69,'G',71-92 ##label
##cross-references GB:M69201; NID:g178021
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##residues 1-92 ##label BAI
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macrophage inflammatory protein 1-beta precursor - human
cytokine HC21; G-26 protein; H400 homolog; lymphocyte
activation gene 1 protein (LAG-1); MIP-1beta; pAT744; SC
protein (misidentification); SIS gamma homolog; T-cell
activation protein 2 (Act-2); T-cell activation protein
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                                                                                                                                  Lipes, M.A.; Napolitano, M.; Jeang, K.T.; Chang, N.T.;
                                                                                                                                                           A31767
                                                                                                                                                                                                                                                                                                                                                                                                                   Napolitano, M.; Modi, W.S.; Cevario, S.J.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Baixeras, E.; Roman-Roman, S.; Jitsukawa,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #formal_name Homo sapiens #common_name man
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Mechiche, S.; Viegas-Pequignot, E.; Hercend, T.; Triebel,
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predicted #label MAT\
#molecular-weight 10085 #cl
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Pred. No. 6.83e+01;
2; Mismatches 0
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Query Match
Best Local Similarity
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                                                                                                                                         24-92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #authors Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G. #journal J. Immunol. (1989) 142:679-687
#title A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             #authors Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, 
#journal J. Immunol. (1989) 143:2907-2916 
#title A novel polypeptide secreted by activated human T 
lymphocytes. 
#cross-references_MUID:90038522
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#cross-references MUID:89140347

#accession B30574
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#cross-references MUID:89325421
#accession A37411
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   authors
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##cross-references GDB:127451; OMIM:153335
pposition 1921-17921
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##cross-references GB:M23502; NID:g533212; PID
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This protein is secreted by activated lymphocytes and monocytes. It is bound by chemokine (C-C) receptor 5 (see PIR:A43113) and receptor 1 (see PIR:A45177).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Clore, G.M.; Lodi, P.J.; Garrett, D.S.; Gronenborn, submitted to the Brookhaven Protein Data Bank, Janua
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Isolation and characterization of a cDNA encoding a putative
cytokine which is induced by stimulation via the CD2
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                                                                                                                                                                                                         chemotaxis; cytokine; inflammation
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                                                                    #disulfide_bonds #status experimental
th 92 #molecular-weight 10212 #chec
                                                                                                               #product macrophage inflammatory protein
experimental #label MAT\
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    88.6%;
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#journal DNA Cell Biol. (1990) 9:589-602
#title Three human homologs of a murine gene encoding an inhibitor
#title of stem cell proliferation.
#cross-references MUID:91103879
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#title
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#journal Nucleic Acids Res. (1990) 18:3261-3270

#wo inflammatory mediator cytokine genes are closely linked and variably amplified on chromosome 17q.
                                                                                                                                                                                                                                                                                           ##cross-references GDB:120369; OMIM:182284
#map_position 17q11-17q21
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#cross-references_MUID:90287155
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#residues 1-93 ##label BLU
##cross-references GB:M24110; GB:M32338; NID:g182848; PID:g182849
                                                                                                                                                                                                                                                                                                                                                                        ##cross-references EMBL:X52149; NID:g34750; PID:g296666
This protein is a member of a "small inducible" or "activation specific" gene family, is likely to be an early-acting interleukin, and is the product of a putative G0/G1 switch gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ##status preliminary
##molecule_type mRNA
##residues 1-93 ##label
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                                        72 QVCADP 77
                                                                                               Match 88.6%;
Local Similarity 66.7%;
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Mol. Cell. 1
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#product LD78-beta protein #status predicted #label M
#length 93 #molecular-weight 10161 #checksum 7784
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Structures of human genes coding for cytokine LD78 and their
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28-Sep-1990 #sequence_revision 28-Sep-1
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LD78-beta protein precursor - human
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Pred. No. 6.83e+01;
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Best Local Similarity 83.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #authors Wempe, F.; Henschen, A.; Scheit, K.H.
#journal DNA Cell Biol. (1991) 10:671-679
#title Gene expression and cDNA coloning identified a m
protein constituent of bovine seminal plasma
monocyte-chemoattractant protein-1 (MCP-1).
#cross-references MUID:92096117
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##residues 50-68,'X',70-74,'X',76 ##label WE2
##experimental_source seminal vesicle
##experimental_source seminal vesicle
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                                                                                                                                                                                                                               ##molecule_type protein
##residues 1-99 ##label WEM
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Local Similarity 83.3%;
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26/1; 65/2
#superfamily macrophage inflammatory
#length 99 #molecular-weight 11114
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monocyte chemoattractant protein 1 precursor - bovine
monocyte chemotactic factor 1; seminal plasma protein Pt
#formal_name Bos primigenius taurus #common_name cattle
03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change
31-oct-1997
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JC2336
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Biochem. Biophys. Res. Commun. (1994) 202:1272-1279
Characterization of the bovine monocyte chemoattractant
                                                                                                                                                                                                                                                                                                                                                                                                    monocyte chemoattractant protein-1 - bovine #formal_name Bos primigenius indicus #common_name zebu cattle 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
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#product monocyte chemoattractant protein 1 #status
predicted #label MAT\
#binding_site carbohydrate (Asn) (covalent) #status
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Pred. No. 6.83e+01
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maxamura, Y., Miyajima, N., Hirosawa, M.; Sugiura, M.;
Sasamoto, S.; Kimura, T.; Hosouchi, T.; Matsuno, A.;
Muraki, A.; Makazaki, N.; Naruo, K.; Okumura, S.; Shimpo,
S.; Takeuchi, C.; Wada, T.; Watanabe, A.; Yamada, M.;
Yasuda, M.; Tabata, S.

#journal DNA Res. (1996) 3:109-136
#title Sequence analysis of the genome of the unicellular cyanobacterium Synechocystis sp. PCC6803. II. Sequence determination of the entire genome and assignment of potential protein-coding regions.

#cross-references MUID:97061201
#accession S76512
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#title Novel expression pattern of a new member of the MIP-1 family #cross-references MUID:91370083
#accession 149555
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PID:g1001627
##note the nucleotide sequence was submitted to the EMBL Data
Library, June 1996
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##residues 1-116 ##label RES
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                             220 EVCTEP 225
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#formal_name Mus musculus #common_name house mouse
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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Best Local Similarity 66.7%;
Matches 4; Conservative
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#journal Appl. Environ. Microbiol. (1988) 54:1289-1292
#title Structure of an endo-beta-1,4-glucanase gene from Clostridium
#title acetobutylicum P262 showing homology with endoglucanase
genes from Bacillus spp.
#cross-references MUID:88268074
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         245 EICNEP 250
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##cross-references EMBL:M37031; NID:g144154; PID:g144155
# #length 429 #molecular-weight 48858 #checksum
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                                                                                                                                                                                                                                                                                                cellulose degradation
glycosidase; hydrolase; polysaccharide degradation
#length 448 #molecular-weight 49366 #checksum 3186
                                                                                                                                                                                                                                                                                                                                                                              hydrolysis of 1,4-beta-D-glucosidic linkages in
beta-D-glucans such as cellulose and lichenin; can
hydrolyze such linkages in beta-D-glucans that also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hazlewood, G.P.; Davidson, K.; Laurie, J.I.; Romaniec, M.P.M.; Gilbert, H.J.
J. Gen. Microbiol. (1990) 136:2089-2097
Cloning and sequencing of the cela gene encoding endoglucanase A of Butyrivibrio fibrisolvens strain A46.
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endoglucanase A precursor - Butyrivibrio fibrisolvens
#formal_name Butyrivibrio fibrisolvens
13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change
#A35971 #type fragment
mast cell growth factor - mouse (fragment)
#formal_name Mus muscullus #common_name house mouse
14-Dec-1990 #sequence_revision 14-Dec-1990 #text_change
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bred. No. 6.83e+01;
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Pred. No. 6.83e+01;
1; Mismatches 1
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Best Local Similarity 66.7%;
Matches 4; Conservative
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A35971
FERENCE A35971

**Rauthors Williams, D.E.; Eisenman, J.; Baird, A.; Rauch, C.; Van Ness K.; March, C.J.; Park, L.S.; Martin, U.; Mochizuki, D.Y.; Boswell, H.S.; Burgess, G.S.; Cosman, D.; Lyman, S.D.

**Journal Cell (1990) 63:167-174

**Litle Identification of a ligand for the c-kit proto-oncogene.

**Gross-references_MUID:91004215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #authors Williams, D.E.; Eisenman, J.; Baird, A.; Rauch, C.; Van K.; March, C.J.; Park, L.S.; Martin, U.; Mochizuki, D.; Boswell, H.S.; Burgess, G.S.; Cosman, D.; Lyman, S.D.; #journal Cell (1990) 63:167-174
#title Identification of a ligand for the c-kit proto-oncogene.
#cross-references MUID:91004215
#accession B35971
                                   #cross-references MUID:89093958
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##residues 1-51 ##label WIL
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##residues 1-49 ##label WIL
##molecule_type mRNA
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macrophage inflammatory protein 1-beta - mouse
H400; SIS gamma; T-cell activation protein gamma
#formal_name Mus musculus #common_name house mouse
28-Aug-1989 #sequence_revision 28-Aug-1989 #text_change
                                                        Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G. J. Immunol. (1989) 142:679-687
A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.
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mast cell growth factor - mouse (fragment)
mast cell growth factor - mouse (fragment)
formal_name Mus musculus #common_name house mouse
14-Dec-1990 #sequence_revision 14-Dec-1990 #text_change
                         C30552
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A30552
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COMMENT This GENETICS
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24-92
Search completed: Thu Apr 1 07:30:11 1999 Job time: 23 secs.
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Matches 4; Conservative
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#title Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta.
#cross-references MUID:89067830
#accession JL0088
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#accession PS0304
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##residues 1-92 ##label DAU
##cross-references EMBL:X62502; NID:g53126; PID:g53127
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##residues 24-33,'XX',36,'X',38 ##label SH2
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##residues 1-92 ##label SHE
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1 EICADP 6
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S22042
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                                                                                                                                                                                                                                                                                                                                                                                                             *superfamily macrophage inflammatory protein glycoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Bauer, D.;
Davatelis, G.; Wolpe, S.D.; Masiarz, F.; Coit, D.; Cerami,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S22042
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#product macrophage inflammatory protein 1-beta #status
#experimental #label MAT\
#binding_site carbohydrate (Asn) (covalent) #status
predicted
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Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Thu Apr 1 07:28:30 1999; MasPar time 2.10 Seconds 76.598 Million cell updates/sec

Tabular output not generated.

Title: Sequence: Description: Perfect Score: >US-08-927-939-8 (1-6) from US08927939.pep 44 1 EICADP 6

enoring table: PAM 150 Gap 15

Searched: 74019 segs, 26840295 residues

Post-processing: Minimum Match 0% Listing first 100 summaries

Database: swiss-prot36 1:swissprot

Statistics: Mean 19.414; Variance 22.851; scale 0.850

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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Result	Score	% Query Match	Length I	В	ID	Description	Pred. No.
1	44	100.0	97	- ;	EOTA_MOUSE	EOTAXIN PRECURSOR (EOS	3.26e+00
2	44	100.0	97	$\vdash$	EOTA_RAT	PRECURSOR (	3.26e+00
ω	44	100.0	86	ш	MCP4_HUMAN	E CHEMOTACTI	3.26e+00
4	44	100.0	99	۲	MCP1_HUMAN	CHEMOTACTIC	3.26e+00
Ŋ	44	100.0	99	۲	MCP3_HUMAN	CHEMOTACTIC	3.26e+00
0	44	100.0	101	۲	MCP1_CANFA	_	3.26e+00
7	44	100.0	104	Н	MCP5_MOUSE	MONOCYTE CHEMOTACTIC P	3.26e+00
80	44	100.0	148	ب	MCP1_RAT		3.26e+00
9	44	100.0	436	Н	THCB_RHOSO	$\overline{}$	3.26e+00
10	44	100.0	700	ب	CAN2_RAT	CALPAIN 2, LARGE (CATA	3.26e+00
11	44	100.0	700	٢	CAN2_MOUSE	2, LARGE	3.26e+00
12	44	100.0	700	ר	CAN2_HUMAN	CALPAIN 2, LARGE (CATA	3.26e+00
13	43	97.7	74	ר	MCPB_BOVIN	MONOCYTE CHEMOTACTIC P	5.42e+00
14	43	97.7	97	Н	EOTA_HUMAN	EOTAXIN PRECURSOR (EOS	5.42e+00
15	43	97.7	99	۲	MCP1_PIG	MONOCYTE CHEMOTACTIC P	5.42e+00
16	42	95.5	99	٢	MCP2_HUMAN		8.95e+00
17	42	95.5	99	1	MCP2_PIG		8.95e+00
18	42	(n	120	Н	MCP1_CAVPO	MONOCYTE CHEMOTACTIC P	8.95e+00
19	42	1 11	148		MCP1_MOUSE	MONOCYTE CHEMOTACTIC P	8.95e+00
20	41	141	89	Н	MIP4_HUMAN	MACROPHAGE INFLAMMATOR	1.46e+01
21	41	1.1	92	سا	MI1B_RAT	MACROPHAGE INFLAMMATOR	1.46e+01
22	41	(.)	92	μ,	MI1A_RAT	MACROPHAGE INFLAMMATOR	1.46e+01
23	41	93.2	99	Н	MCP2_BOVIN	MONOCYTE CHEMOTACTIC P	1.46e+01

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COME-ROD HOMEDBOX PROT HYPOTHETICAL 43.4 KD P GIYCOGEN SYNTHASE KINA NADH-UBLOUINONE OXIDOR ALLANYL-TRNA SYNTHETASE IMMEDIATE-EARLY PROTEI IMMEDIATE-EARLY PROTEI SEX-DETERMINING TRANSF NEUTROPHIL ACTYVATING VERY HYPOTHETICAL 13.3 MAJOR ENVELOPE GLYCOPP HYPOTHETICAL 80.2 KD P CALPAIN P94, LARGE (CA CALPAIN P94, LARGE (CA PROTEIN E PROTEIN E T-CELL SPECIFIC RANTES TYPOTHETICAL PROTEIN I T-CELL SPECIFIC RANTES T-CELL SPECIFIC RANTES T-CELL SPECIFIC RANTES T-CELL SPECIFIC RANTES T-CELL SPECIFIC RANTES T-CELL SPECIFIC CANTES MACROPHAGE INFLAMMATOR T-CELLAR CALCIUM-BIND T-CENALDEHYDE 3-PHOSP STREPTOGRISIN A PRECUR STREPTOGRISIN A PRECUR STRE	ALANYL-TRNA SYNTHETASE FIXB PROTEIN:  MACROPHAGE INFLAMMATOR MACROPHAGE INFLAMMATOR MACROPHAGE INFLAMMATOR MACROPHAGE INFLAMMATOR FONGLILLAR LYMPHOCYTE L MONOCYTE CHEMOTACTIC PCIO PROTEIN PRECURSOR.  HYPOTHETICAL 33.2 KD PCONE-ROD HOMEOBOX PROTEIN PRECURSOR PROCURSOR PROGLUCANASE TO ENCOGLUCANASE TO FRECURSOR ACROPHAGE INFLAMMATOR ENCOTAXIN PRECURSOR COTAXIN PRECURSOR CYMPHOTACTIN PRECURSOR CYMPHOTACTIN PRECURSOR MACROPHAGE INFLAMMATOR ENCOTAXIN PRECURSOR CYMPHOTACTIN PRECURSOR MONOCYTE CHEMOTACTIC PSTEM CELL FACTOR PACCURSOR MONOCYTE CHEMOTACTIC PSTEM CELL PACCURSOR PACCUR
6.10e+0.6.10e+0.6.10e+0.6.10e+0.6.10e+0.6.10e+0.6.10e+0.6.10e+0.6.10e+0.6.10e+0.6.10e+0.6.10e+0.6.10e+0.6.10e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+0.9.64e+	1.46eeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee

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98
99
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                      DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GONZALO J.-A., JIA G.-Q., AGUIRRE V., FRIEND D., COYLE A.J., JENKINS N.A., LIN G.-S., KATZ H., LICHTMAN A., COPELAND N.G., GUTIERREZ-RAMOS J.-C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-FEB-1996 (REL. 33,
01-FEB-1996 (REL. 33,
15-JUL-1998 (REL. 36,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MGD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          - -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IMMUNITY 4:1-14(1996).
-i- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS,
DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EOTA_MOUSE
        EOTAXIN
                                                                                                                                                                                                                                                                                                                                                                                                   CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <del>-</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN-C57BL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE; 96004658.
ROTHENBERG M.E., LUSTER A.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE-LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EOTAXIN PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                           EOSINOPHIL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE; PS00472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE; 96158746.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EUTHERIA; RODENTIA
                                                                                                                                                                                                                                                                                                                                                                                                                                       INFLAMMATORY
                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                      71 EICADP 76
                                                                                                                                                                                  سا
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PTM: O-GLYCOSYLATED (PROBABLE).
SIMILARITY: BELONGS TO THE INTERCRINE
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE OF ALLERGIC INFLAMMATORY REACTIONS), BUT NOT LYMPHOCYTES, MACROPHAGES OR NEUTROPHILS. SUBCELLULAR LOCATION: EXYRACELLULAR. TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN THE THYMUS. EXYRACESION INDUCTIBLE IN THE LUNG (TYPE I ALVEOLAR EPITHELIAL CELLS), INTESTINE, HEART, SPLEEN, KIDNEY. INDUCTION: BY INTERFERON-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .; U26426; G995911; -...; U40672; G1113937; -...
MGI:103576; SCYA11.
                                                                                                                                                                                EICADP
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5 6 6
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1998 (REL.
PRECURSOR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       00472; SMALL_CYTOKINES_CC; CYTOKINE; CHEMOTAXIS; GLY
                                                                                                                                                                                  σ
(REL. 36, CREATED)
(REL. 36, LAST SEQUENCE UPDATE)
(REL. 36, LAST ANNOTATION UPDATE)
URSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                            RESPONSE.
1 23
1 97
24 97
32 57
32 73
                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SCI.
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2279
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2412
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                                                                                                                                                                                                                                                                                                                                          10893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CREATED)
LAST SEQUENCE UPDATE)
, LAST ANNOTATION UPDATE)
OSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 U.S.A.
                                                                                                                                                                                                                                                                                                                                            W.
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COAC_SCHPO
POL1_BAYMJ
POL1_BAYMG
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                                                                                                                                                                                                                                                                                                                                      EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
F85A96BC CRC32;
                                                                                                                                                                                                                                                                               Score 44; DB 1; 1
Pred. No. 3.26e+00;
                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                 POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LEDER P.;
92:8960-8964(1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                     PRT;
                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                         GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97
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1.51e+02
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1.51e+02
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DISULFID
DISULFID
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CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                15-JUL 1998 (REL. 36, CREATED)
15-JUL 1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL 1998 (REL. 36, LAST ANNOTATION UPDATE)
15-JUL 1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 4 PRECURSOR (MCP-4)
CHEMOATTRACTANT PROTEIN 4) (CK-BETA10) (NCC-1).
SCYAL3 OR MCP4 OR NCC1.
HOMO SAPIENS (HUMAN).
EUKARXOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPOEUKARXOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                               UGUCCIONI M., LOETSCHER P., FORS
LI Y., KREIDER B., GAROTTA G., T
J. EXP. MED. 183:2379-2384(1996)
                                                                                                                                                                                                                                        MEDLINE; 97113354.
GARCIA-ZEPEDA E.A., COMBADIERE C.,
LAVIGNE F., HAWID O., MURPHY P.M.,
J. IMMUNOL. 157:5613-5626(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MCP4_HUMAN
Q99616;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBMITTED (MAY 1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

1- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, A PROMINENT FEATURE OF ALLERGIC INFLAMMATORY REACTIONS (BY SIMILARITY).

1- SUBCELLULAR LOCATION: EXTRACELLULAR.

1- PTM: O-GLYCOSYLLATED (PROBABLE).

1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. WILLIAMS C.M., NEW FLANAGAN B.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RATTUS NORVEGICUS (RAT) EUKARYOTA; METAZOA; CHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
MEDLINE; 97341179
BERKHOUT T.A., SAI
                                                                                                                                                           MEDLINE; 96235049
                                                                                                                                                                                                                                                                                                                           TISSUE-HEART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUBMITTED
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                                         TISSUE=FETAL
                                                            SEQUENCE FROM
                                                                                                                                                                                    TISSUE-FETAL
                                                                                                                                                                                                   SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                     EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EOSINOPHIL; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FISSUE=LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      71 EICADP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 EICADP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (DEC-1996)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CYTOKINE; CHEMOTAXIS; RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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44324
                                                          N.A.,
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  SARAU
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STANDARD;
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                                                            AND
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  н.м.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL/GENBANK/DDBJ DATA BANKS
                                                          SEQUENCE
                                                                                                                                                                                                     SEQUENCE
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MOORES K., WHITE J.R.,
                                                                                                                      FORSSMANN U.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WILSON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     POTENTIAL.
EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
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Pred. No. 3.
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L -> S (IN REF.
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                                                                                                                                                                                                                                                             ROTHENBERG M.E.,
LUSTER A.D.;
                                                          22-33
                                                                                                                                                                                                     17-98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; I
3.26e+00;
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                                                                                                                                                                                                                                                                                                                                                                                                        TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TETRAPODA; MAMMALIA;
                                                                                                                      DEWALD B.,
BAGGIOLINI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MONOCYTE
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ELSHOURBAGY
                                                                                                                                                                                                                                                                                    SARAFI M.
                                                                                                                      M.;
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Best Local S
Matches
                                                                                                                                                                                                                                                          MCP1_HUMAN STANL...

P13500;

P13500;

O1-JAN-1990 (REL. 13, CREATED)

O1-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)

O1-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)

15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)

MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOTACTIC AND ACTIVATING FACTOR) (MCAF) (MONOCYTE SECRETORY PROTEIN JE)

AND ACTIVATING FACTOR) (MCAF) (HC11) (SMALL INDUCIBLE CYTOKINE AND ACTIVATIVATIONAL PROTEIN 1) (HC11) (SMALL INDUCIBLE CYTOKINE AND ACTIVATIONAL PROTEIN 1) (HC11) 
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SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES,
BASOPHILS AND EOSINOPHILS, BUT NOT NEUTROPHILS. SIGNALS THROUGH
CCR2B AND CCR3 RECEPFORS. PLAYS A ROLE IN THE ACCUMULATION OF
LEUKOCYTES AT BOTH SIDES OF BALLERGIC AND NONALLERGIC INFLAMMATION.

MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL
MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL
WALL DURING THE DISEASE PROCESS OF ARTHEROSCLEROSIS. MAY PLAY A
ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHAIN
MOD_RES
DISULFID
DISULFID
CARBOHYD
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; CYTOKINE;
                                                                                                  FURUTANI
LARSEN C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; U46767; GI
EMBL; AC002482;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. DANTE M., GIBSON F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPELBAUM E., REAPE T.J., BRAWNER M., MAKWANA J., FOLEY J.J., SCHMIDT D.B., IMBURGIA C., MACNULTY D., MATTHEWS J., O'DONNELL K., O'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPHEE C.; J., BIOL. CHEM. 272:16404-16413(1997).
BIOCHEM. BIOPHYS.
[2]
SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 + +
                                                                                                                                                                  MEDLINE;
                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     72 EICADP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity es 6; Conse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PTM: ONE MAJOR ISOFORM MCP-4, AND TWO MINOR ISOFORMS (LA)MCP-4 (FNPQGLA)MCP-4 ARE PRODUCED BY DIFFERENTIAL SIGNAL CLEAVAGE. (LA)MCP-4 IS ABOUT 30 FOLD LESS ACTIVE THAN MCP-4.

SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKI C-C) (CHEMOKIME CC).

L; 046767; G1732123; -.

L; AC002482; G2340091; -.
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MASS SPECTROWETRY: MW-9314; MW_ERR-30; METHOD-MALDI; I
MASS SPECTROMETRY: MW-8760; MW_ERR-30; METHOD-MALDI; I
MASS SPECTROWETRY: MW-8575; MW_ERR-30; METHOD-MALDI; I
MASS SPECTROWETRY: MW-8575; MW_ERR-30; METHOD-MALDI; I
INDUCTION: BY INTERLEUKIN-1 AND INF-ALPHA.

TISSUE SPECIFICITY: WIDELY EXPRESSED. FOUND IN SMALL I
TISSUE SPECIFICITY: WIDELY EXPRESSED. FOUND IN SMALL I
THENUS, COLON, LUNG, TRACHEA, STOMACH AND LYMPH NODE.
SEEN IN THE PULMONARY ARTERY SMOOTH MUSCLE CELLS.
THIS PROTEIN CAN BIND HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EICADP
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                                                                                           E FROM N.A.
; 89165862.
I Y., NOMURA H.,
C.G., OPPENHEIM J
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                                                                   RES.
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KIS; SIGNAL; GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
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29
29
29
                                                                   COMMUN.
                                                            NOTAKE M., OYAMADA Y., FU
J.J., MATSUSHIMA K.;
COMMUN. 159:249-255(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 44;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MONOCYTE CHEMOTACTIC PROTEIN 4.
PYRROLLDONE CARBOXYLIC ACID.
BY SIMILARITY.
BY SIMILARITY.
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3.26e+00;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CRC32;
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                                                                                                                                FUKUI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INTESTINE,
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RANGE=24-98.
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                                                                                                                                YAMADA
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SEQUENCE FROM N.A. MEDLINE; 90290466. SHYY Y.J., LI Y.S., BIOCHEM. BIOPHYS. RE
                                                                                                                                                                                                                                                                                                                        SEQUENCE OF 24 ...
MEDLINE; 89184525.
MEDLINE; 89184525.
MOBILIARY TOSHIMURA T., LI
SHABANOWITZ J., HUNT D.F., APP:
SHABANOWITZ J., ACAD. SCI. U.S.A.
                                                                   MEDLINE; 942
ZHANG Y.J.,
       MEDLINE; 97053697.

KIM K.-S., RAJARATHNAM K., C
FEBS LETT. 395:277-282(1996)
-!- FUNCTION: CHEMOTACTIC FA
                                                                                                                                                 MEDLINE; 96234959
HANDEL T.M., DOMA
BIOCHEMISTRY 35:6
                                                                                                                                                                                                                                                                                                                                                                                                                                     LI Y.S., SHYY Y.J., KOLATTUKUDY P.E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEBS
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MOI:
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ROLLINS B.J., STIER
MOL: CELL. BIOL. 9:4
                                                                                                                                                                                                             X-RAY CRYSTALLOGRAPHY (1.85 ANGSTROMS).
MEDLINE; 97143315.
                                                                                                                                                                                                                                        GRONENBORN A.M., CLORE G.M.; PROTEIN ENG. 4:263-269(1991).
                                                                                                                                                                                                                                                                                                                                                                                    ADV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         [6] .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. MEDLINE; 91207938. CHANG H.C., HSU F.
                                                                                                               WEBER M.,
                                                                                                                        MEDLINE; 96195223.
                                                                                                                                 EFFECT OF DELETION OF N-TERMINAL RESIDUES
                                                                                                                                                                            STRUCTURE BY
                                                                                                                                                                                                                                                          3D-STRUCTURE MODELLING MEDLINE; 91312872.
                                                                                                                                                                                                                                                                                     BIOCHEM. BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM MEDLINE; 9209!
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. MEDLINE; 94150478.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                            SUBUNIT.
                                                                                      MUTAGENESIS
                                                                                                                                                                                                      LUBKOWSKI
                                                                                                                                                                                                                                                                                             DECOCK B.,
                                                                                                                                                                                                                                                                                                     MEDLINE;
                                                                                                                                                                                                                                                                                                              SEQUENCE OF 29-53 AND
                                                                                                                                                                                                                                                                                                                                                                                           YOSHIMURA T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LEONARD E.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          YOSHIMURA
                                                    15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (EDLINE;
                                                           BIOL.
                                                                                                       EXP. MED.
                                                                                                                                                                                            OWSKI J.,
STRUCT. F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IMMUNOL.
                                                                                                                                                                                                                                                                                                                                                                                    EXP.
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92095166.
NOT NEUTROPHILS
                                                                                                                                                                                                                                                                                            90211336.
B., CONINGS
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89153605.
                                                           CHEM.
                                                                    94253189.
J., RUTLEDGE
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                                                                                                               UGUCCIONI
                                                                                                                                                                                                                                                                                                                                                                                    MED.
                                                                                                                                                                                                                                                                                                                                                                                                                              BIOCHEM.
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                                                                                                                                                                             NMR.
                                                                                                       JCCIONI M., BAGGIOLINI
183:681-685(1996).
                                                                                                                                                 DOMAILLE P.J.;
35:6569-6584(1996).
                                                                                                                                                                                             BIOL.
                                                                                                                                                                                                                                                                                                                                                                                   LEONARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SU F., FREEMAN G.J.,
1:388-399(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         YUHKI
                                                                                                                                                                                             BUJACZ G., DOMAILLE P.J., SIOL. 4:64-69(1997).
                                                            TLEDGE B.J., ROLLINS B. 269:15918-15924(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IER P., ERNST T.,
9:4687-4695(1989)
                                                                                                                                                                                                                                                                                     RES.
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                                                                                                                                                                                                                                                                                    LENAERTS
COMMUN. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMUN.
OR EOSINOPHILS.
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         FACTOR THAT ATTRACTS
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                         CLARK-LEWIS
                                                                                                                                                                                                                                                                                                                                                                                                                                               J.G., VALENTE
                                                                                                                                                                                                                                                                                                                                                                                   -56(1991).
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167:904-909(1990).
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169:346-351(1990)
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                                                                    B.J.;
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                         H.,
                                                                                                               CLARK-LEWIS
TRACTS MONOCYTES AND BASOPHILS AUGMENTS MONOCYTE ANTI-TUMOR
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                          SYKES
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H
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Best Local :
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EMBL; M31026; G386961; JOINED.

EMBL; M31025; G386961; JOINED.

EMBL; M3025; G386961; JOINED.

EMBL; M24545; G307163; -...

EMBL; M24526; G334514; -...

EMBL; M24768; G34514; -...

EMBL; M37719; G487124; -...

EMBL; M28226; G338007; JOINED.

EMBL; M28225; G338007; JOINED.

EMBL; M28223; G388007; JOINED.

EMBL; M28223; G38007; JOINED.

EMBL; M28223; G38007; JOINED.

EMBL; M28223; G388007; JOINED.

EMBL; M28223; G388007; JOINED.

EMBL; M28223; G388007; J
                     MCP3_HUMAN STANDARD; PRT; 99 AA.
P80098;
01-DEC-1992 (REL. 24, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (MCP-3) (MONOCYTE CHEMOATTRACTANT PROTEIN 3) (NC28).
SCYA7 OR MCP3.
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CHAIN
MOD_RES
DISULFID
DISULFID
CARBOHYD
VARIANT
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PTM: PROCESSING AT THE N-TERMINUS CAN REGULATE RECEPTOR AND TARGET CELL SELECTIVITY. DELETION OF THE AMINO- TERMINAL RESIDUE CONVERTS IT FROM AN ACTIVATOR OF BASOPHIL TO AN EOSINOPHIL CHEMOATTRACTANT. SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
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                                                                                                                                                                                                                                                                                                                 EICADP
  SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity 100.0% 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PS00472;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99
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                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 44;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MISSING: 83% REDUCTION I A D->A: 90% REDUCTION IN A N->A: 50% REDUCTION IN A R->F: 95% REDUCTION IN A S->Q: 40% REDUCTION IN A S->D: LOSS OF ACTIVITY. R->L: LOSS OF ACTIVITY. R->L: 90% REDUCTION IN A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R->L: LOSS
D->L: 90%
5355B695
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G: LOSS OF ACTIVITY.

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REDUCTION IN ACTIVITY.

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3.26e+00;
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Best Local
                                                                                              DISULFID DISULFID CARBOHYD
                                                                  CONFLICT
CONFLICT
SEQUENCE
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-!- EUNCTION: CHEMOTRACTIC FACTOR THAT ATTRACTS MONOCYTES EOSINOPHILS, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE A ACTIVITY. ALSO INDUCES THE RELEASE OF GELATINASE B. T
                                                                                                                                                                                                                                                                                                                                                                                                                       FEBS LETT.
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[1]
                                                                                                                                        CHAIN
                                                                                                                                                                                                                                                   EMBL;
EMBL;
EMBL;
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LAUREYS G., VAN DAMME J.;
GENOMICS 21:403-408(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MINTY A., CHALON P., GUILLEMOT J.C.
MAGAZIN M., MILOUX B., MINTY C., RAI
SHIRE D., FERRARA P., CAPUT D.;
EUR. CYTOKINE NETW. 4:99-110(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A., AND SEQUENCE OF MEDILINE; 93213290.
OPDENAKKER G., FROYEN G., FITEN P., BIOCHEM. BIOPHYS. RES. COMMUN. 191:
                                                                                                                                                   SIGNAL
                                                                                                                                                                                                                                                                                                -1- SUBUNIT: MONOMER.
-1- PTM: O-GLYCOSYLATED.
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                    STRUCTURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRUCTURE BY NMR, AND
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                                                                                                                               MOD_RES
                                                                                                                                                            INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE;
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                                      Local
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                                                                                                                                                                                                         C-C) (CHEMOKINE CC).
LL; X72308; G313708; AS
LL; X72309; -; NOT_ANN
LL; X71087; G288399; -
SL; X71087; G288397; AS
LL; X71087; G288397; AS; JC1478; JC1478.
L; S32222; S32222.
L; S32222; S32222.
L; S32222; S32222.
L; S32222; S32222.
EICADP
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                                                                                                                                                                                                  INCV; 15-0CT-97.
                                       Similarity
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94375065.
                                                                                                                                                                  PS00472; SMALL_CYTOKINES_CC; CHEMOTAXIS; HEPARIN-BINDING;
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395:277-282(1996)
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           78
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larity 100.0%;
Conservative
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176:59-65(1992).
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11200
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                                                                MONOCYTE CHEMOTACTIC PROTEIN 3.
PYRROLIDONE CARBOXYLIC ACID.
BY SIMILARITY.
BY SIMILARITY.
POTENTIAL.
T -> K (IN REF. 4).
MISSING (IN REF. 4).
MISSING (IN REF. 4).
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191:535-542(1993)
                            re 44; DB 1; Le
1. No. 3.26e+00;
Mismatches 0;
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; GLYCOPROTEIN;
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                                              Length 99;
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Best Local S
Matches
SEQUENCE FROM N.A.

MEDLINE; 97079149.

JIA G.-Q., GONZALO J.A., LLOYD C., KF
WERSHIL B.K., GUTIERREZ-RAMOS J.C.;

J. EXP. MED. 184:1939-1951(1996).

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                                                                                                                                                                                                                                                                                             Q62401;
01-NOV-1997
01-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DISULFID DISULFID
                                                                                                                                                                                                               CHEMOKINE).
SCYA12 OR MCP5
                                                                                                                                                                                                                                                  01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 5 PRECURSOR (MCP-5)
                                                                                                                                                                                                                                                                                                                                                              MCP5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
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CANIS FAMILIARIS (DOG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P52203;
01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UP
15-JUL-1998 (REL. 36, LAST ANNOTATION
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ROSSEN R.D., SMITH C.W., ENT. CIRCULATION 95:693-700(1997)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHEMOATTRACTANT PROTEIN-1).
                                                                                                                                                   EUTHERIA;
                                                                                                                                                                        EUKARYOTA;
                                                                                                                                                                                            MUS MUSCULUS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KUMAR A.G., BALLANTYNE
LINDSEY M.L., HAWKINS H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             y Match 100.0%;
Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73 EICADP 78
                                                                                                                                                                                                                                                                                                                                                                                                                                              ۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM INDUCTION: BY TNF-ALPHA.
TISSUE SPECIFICITY: ENDOTHELIUM OF SMALL VEINS VEINS, AND INFILTRATING LEUKCCYTES.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FUNCTION: CHEMOTACTIC FÁCTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS. IMPORTANT FACTOR IN THE COURSE OF THE INFLAMMATORY REACTION TO REPERFUSION OF THE PREVIOUSLY ISCHEMIC MYCCARDIUM.
MAY PLAY A SIGNIFICANT ROLE IN MONOCYTE TRAFFICKING INTO THE REPERFUSED MYCCARDIUM.
                                                                                                                                                                                                                                                                                                                                                              MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                              EICADP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PS00472; SMALL_CYTOKINES_CC; 1.
PS00472; SMALL_CYTOKINES_CC; 1.
PS00472; STGNAL; INFLAMMATORY RESPONSE.
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                                                                                                                                                     RODENTIA.
                                                                                                                                                                US (MOUSE).
METAZOA; CHORDATA;
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                                                                                                                                                                                                                                                                                                                                                              STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              M.
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MONOCYTE CHEMOTACTIC PRO
PYRROLIDONE CARBOXYLIC A
SIMILARITY).

BY SIMILARITY.

BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 44; DB 1; I
Pred. No. 3.26e+00;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                      VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                            PRT;
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3Y SIMILARITY.
A7075B14 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                   KREMER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TETRAPODA; MAMMALIA;
                                                                ۲:
                                                                                                                                                                        TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KUKIELKA
MACKAY C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACID
                                                                   MARTINEZ
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Best Local
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                                                                                                                C-C) (CHEMOKINE CC).
EMBL; X17053; G55531; -.
EMBL; M57441; G205334; -.
PIR; JN0128; JN0128.
PIR; S07723; S07723.
                      HSSP; P135
PROSITE; F
CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHAIN
DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MCP1_RAT STANDARD; PRT; 148 AA.
P14844;
01-APR-1990 (REL. 14, CREATED)
01-APR-1990 (REL. 14, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AND LYMPHOCYTES BUT NOT NEUTROPHILS, POSINOPHILS, MONOCYTES,
AND LYMPHOCYTES BUT NOT NEUTROPHILS. POTENT MONOCYTE ACTIVE
CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC
INFLAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A
PIVOTAL ROLE DURING EARLY STACES OF ALLERGIC LUNG INFLAMMATION.
-!- SUBUNIT: HOMODIMER (BY SIMILARITY).
-!- TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND
THYMUS. ALSO FOUND IN THE SALLYARY GLANDS CONTALNING LYMPH NODES,
BREAST, HEART, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.
-!- INDUCTION: BY IFN-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-WAG/RIL.
STRAIN-WAG/RIL.
MEDLINE; 90174947.
MEDLINE; 9017494.
MEDLINE; 901749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SERUM-RESPONSIVE JE PROTEIN).
SCYA2 OR JE OR MCP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; |
CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MGD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE; 97149438.
SARAFI M.N., GARCIA-ZEPEDA E.A., MACLEAN J.A., CHARO LUSTER A.D.;
J. EXP. MED. 185:99-109(1997).
                                                                                                                                                                                                                                                                                                                                                                            BIOCHEM. BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RATTUS NORVEGICUS (RAT) EUKARYOTA; METAZOA; CHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL
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                                                                                                                                                                                                                                                                              -!- SUBUNIT: MONOMER OR
-!- SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN-WAG/RIJ; TISSUE-KIDNEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; U5071
                                                                                                                                                                                                                                                                                                                                                                                                                                      YOSHIMURA T., TAKEYA M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        72 EICADP 77
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                                                                                                                                                                                                                                                                                                                                                                        FUNCTION: CHEMOTACTIC
                                                                                                                                                                                                                                                                                                                                               NEUTROPHILS.
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ITE; PS00472; SMALL_(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EICADP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        U50712; G1477582; -. U66670; G1881583; -.
                                                             P13500; 1MC/
(E; PS00472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      E FROM N.A. ; 91128376.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PS00472; SMALL_CYTOKINES_CC; CHEMOTAXIS; SIGNAL; INFLAMM
   CHEMOTAXIS; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         104 AA;
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433
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                                                                                          1MCA.
                                                             SMALL_CYTOKINES_CC;
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                                SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                        COMMUN. 17
                                                                                                                                                                                                                                                                              HOMODIMER;
                                                                                                                                                                                                                                                                                                                                                                     TAKAHASHI K.;
OMMUN. 174:504-509(1991).
C FACTOR THAT ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 44; DB 1; 1
Pred. No. 3.26e+00;
0; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BY SIMILARITY.
BY SIMILARITY.
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; INFLAMMATORY RESPONSE.
BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN
   BY SIMILARITY
                             INES_CC; 1.
INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BOS J.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                              MER; IN EQUILIBRIUM (BY INTERCRINE BETA FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08FA6C35 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VAN DER EB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          А.J.;
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RESULT CONTROL OF CONT
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Best Local :
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Best Local Similarity 100.0%;
Matches 6; Conservative
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DISULFID
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAN2_RA
                                                      SEQUENCE FROM N.A.
MEDLINE; 94032492.
DELUCA C.I., DAVIES P.L., SAMIS J.A., I
BIOCHIM. BIOPHYS. ACTA 1216.81-93(1993)
-!- FUNCTION: CALPAINS ARE CALCIUM-ACT!
                                                                                                                                                                                                                                                                                                                                            01-JUN-1994 (REL. 29, CREATED)
01-JUN-1994 (REL. 29, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
CALPAIN 2, LARGE (CATALYTIC) SUBUNIT (EC 3.4.22.17)
NEUTRAL PROTEINASE) (CANP) (M-TYPE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 943492;
01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UP
01-NOV-1995 (REL. 32, LAST ANNOTATION
                                                                                                                                                                                                                                                                 RATTUS NORVEGICUS (RAT)
EUKARYOTA; METAZOA; CHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE; PS00086; CYTULHALLE, PROSITE; MONOOXYGENASE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      THCB OR CYP11
RHODOCOCCUS S
                                                                                                                                                                                                                                        EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CYTOCHROME P450 116 (EC 1.14. -. -)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        J. BACTERIOL. 177:676-687(1995).
- FUNCTION: DEGRADATION OF THIOCARBAMATE HERBICIDES.
- INDUCTION: BY EPTC (S-ETHYL DIPROPYLCARBAMOTHIOATE).
- INDUCTION: BELONGS TO THE CYTOCHROME P450 FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DE MOT R
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           288 EICADP
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nes 6; Conser
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                                                                                                                                                                                                                                           RODENTIA.
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      REGULATION:
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SP.
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FIRMICUTES; ACTINOMYCETALES;
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48796
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      CALPAIN II
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                                                            CALCIUM-ACTIVATED
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BY SIMILARITY.
BY SIMILARITY.
POTENTIAL.
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Pred. No. 3.26e+00
0; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 44; DB 1;
Pred. No. 3.26e+00
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                                                            NON-LYSOSOMAL THIOL.
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BY MILIMOLAR
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                                                                                                                                                                                                                                                                    MAMMALIA;
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CALLY...

CALLY...

REMBL; L09120; G4v...

DR PIX; S38361; S38361; 2.

DR PROSITE; PS00018; EF_HAND; 2.

DR PROSITE; PS00139; THIOL_PROTEASE_HIS; FALSE_NEG.

DR PROSITE; PS00639; THIOL_PROTEASE_ASN; FALSE_NEG.

DR PROSITE; PS00640; THIOL_PROTEASE_ASN; FALSE_NEG.

DR PROSITE; PS00640; THIOL_PROTEASE; CALCIUM-BINDING; MULTIGENE FAMILY.

THOOLASE; THIOL PROTEASE; CALCIUM-BINDING PROTEASE ACTIVITY.

THOOL PROTEASE ACTIVITY.
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Best Local
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                                                                                                                                                                                                                                                                                                                        CAN2_MOUSE STANDARD; PRT; 700 AA.
008529; 035518;
01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
0ALPAIN 2, LARGE (CATALYTIC) SUBUNIT (EC 3.4.22.17) (CALCIUM-ACTIVATED NEUTRAL PROTEINASE) (CANP) (M-TYPE) (MILLIMOLAR-CALPAIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DOMAIN
ACT_SITE
ACT_SITE
ACT_SITE
CA_BIND
CA_BIND
                                                                                                                               SUBMITTED (OCT-1997) TO
                                                                                                                                                                        SEQUENCE FROM N.A. STRAIN-BALB/C;
                                                                                                                                                                                                                          STRAIN-BALB/C;
DEAR T.N.;
                                                                                                                                                                                                                                                                                             MUS MUSCULUS (MOUSE)
EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CONCENTRATIONS OF CALCIUM.

- I SUBUNIT: HETERODIMER OF A LARGE (CATALYTIC) AND A SMALL (REGULATORY) SUBUNIT:

- I: SUBCELLULAR LOCATION: CYTOPLASMIC.
- I: THIS PROTEIN SEEMS TO BIND TWO MOLES OF CALCIUM.
- I: THIS PROTEIN SEEMS TO BE 2 TYPES OF CALPAIN: UBIQUITOUS FOR CALPAIN I (MICRO- MOLES CA++ REQUIRING) AND CALPAIN II (MIL CA++ REQUIRING), AND TISSUE SPECIFIC FORMS - CALPAIN P94 AN THE SMALL UNIT IS COMMON TO ALL FORMS.
- I: SIMILARITY: BELONGS TO PEPTIDASE FAMILY C2; ALSO KNOWN AS TO SIMILARITY: BELONGS TO PEPTIDASE FAMILY C2; ALSO KNOWN AS TO
                                                                                                                                                          OZAKI Y.;
                                                                                                                                                                                                                SUBMITTED (APR-1997)
                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                 EUTHERIA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                  ENZYME REGULATION: CALPAIN II IS ACTIVATED I CONCENTRATIONS OF CALCIUM (BY SIMILARITY). SUBUNIT: HETERODIMER OF A LARGE (CATALYTIC) (REGULATORY) SUBUNIT. SUBUNIT.
(REGULATORY) SUBJURE.
SUBCELLULAR LOCATION: CYTOPLASMIC.
SUBCELLULAR LOCATION: CYTOPLASMIC.
IN MAMMALS THERE SEEM TO BE 3 DISTINCTS FORMS: CALPAIN I (MICRO-
MOLES CA++ REQUIRING), CALPAIN II (MILI-MOLE CA++ REQUIRING),
MOLES CA++ REQUIRING), CALPAIN II (MILI-MOLE CA++ REQUIRING),
MOLES CA++ REQUIRING), CALPAIN II (MIT IS COMMON TO ALL FORMS.
                                                                                                                   PROTEASES.
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larity 100.0%;
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                                                                                                                               O EMBL/GENBANK/DDBJ DATA BANKS.
ARE CALCIUM-ACTIVATED NON-LYSO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IV, CALCIDM-BINDING
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
SITE 1 (PROBABLE).
SITE 2 (PROBABLE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 44; DB 1; Le
Pred. No. 3.26e+00;
0; Mismatches 0;
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                                                                                                                                                                                                                                                                                             VERTEBRATA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CRC32;
                                                                                                                                                                                                                DATA
                                                                                                                                                                                                                                                                                             TETRAPODA; MAMMALIA;
                                                                                                                                 NON-LYSOSOMAL THIOL-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 700;
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                                                                                                      BY MILIMOLAR
                                                                             AND
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                                                                            A SMALL
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94 AND NCL2.
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Best Local
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MGD; MGI:88264; CAPN4.

MGD; MGI:88264; CAPN4.

MGD; MGI:88264; CAPN4.

PROSITE; PS00018; EF_HAND; 2.

PROSITE; PS00019; THIOL_PROTEASE_CYS; 1.

PROSITE; PS00639; THIOL_PROTEASE_ASN; FALSE_NEG.

PROSITE; PS00640; THIOL_PROTEASE; ASN; FALSE_NEG.

PROSITE; PS00640; THIOL_PROTEASE; ASN; FALSE_NEG.

PROSITE; PS00640; THIOL_PROTEASE, PROTEASE, ASNIPLY.

TYDROLASE; THIOL_PROTEASE, CALCIUM-BINDING; MULTIGENE FAMILY.

1, REGULATION OF PROTEASE ACTIVITY.

11, THIOL_PROTEASE.
                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE; 89166474. IMAJOH S., AOKI K., SUZUKI K.;
                                                                                                                                                                                                                                                                                                                       P17655; Q16738;
01-AUG-1990 (REL. 15, CREATED)
01-AUG-1990 (REL. 15, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
CALPAIN 2, LARGE (CATALYTIC) SUBUNIT (EC 3.4.22.17)
REUTRAL PROTEINASE) (CANP) (M-TYPE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DOMAIN
ACT_SITE
ACT_SITE
ACT_SITE
                                                                                                                                                   MEDLINE;
HATA A.,
                                                                                                                                                                                                                                                                                                                  CAPN2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CONFLICT
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DOMAIN
                                                                                                                                                             TISSUE-LYMPH NODE;
MEDLINE; 89197947.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; Y10139; E293718; -. EMBL; D38117; D1023840; -. MGD; MGI:88264; CAPN2.
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                                                                                                       ÷
                                                                                                                          HATA A., OHNO S., AKITA Y., SUZUKI K.;
J. BIOL. CHEM. 264:6404-6411(1989).
-!- FUNCTION: CALPAINS ARE CALCIUM-ACTIVATED NON-LYSOSOMAL THIOL-
                                                                                                                                                                                      SEQUENCE OF 1-79 FROM
                                                                                                                                                                                                            BIOCHEMISTRY 27:8122-8128(1988).
                                                                                                                                                                                                                                                                                 EUKARYOTA; METAZOA;
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                      HOMO SAPIENS (HUMAN)
                                                                                                                                                                                                                                                                                                                                                                                                 CAN2_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CA_BIND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80 EICADP 85
         SUBUNIT: HETERODIMER OF A LARGE (CATALYTIC) AND (REGULATORY) SUBUNIT: SUBCELLULAR LOCATION: CYTOPLASMIC.

IN MAMMALS THERE SEEM TO BE 3 DISTINCTS FORMS: C MOLES CA++ REGUIRING), CALPAIN II (MILI-MOLE CA+ AND CALPAIN P94. THE SMALL UNIT IS COMMON TO ALL THIS PROTEIN SEEMS TO BIND TWO MOLES OF CALCIUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 THIS PROTEIN SEEMS TO BIND TWO MOLES OF CALCIUM (BY SIMILARITY). SIMILARITY: TO OTHER EF-HAND CALCIUM BINDING PROTEINS. SIMILARITY: BELONGS TO PEPTIDASE FAMILY C2; ALSO KNOWN AS THE CALPAIN FAMILY OF THIOL PROTEASES.
                                                                                          ENZYME REGULATION: CALPAIN II IS CONCENTRATIONS OF CALCIUM.
                                                                                                                 PROTEASES.
SIMILARITY: TO OTHER EF-HAND CALCIUM BINDING PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                  EICADP
                                                                                                                                                                                                                                                                                                                  OR CANPI
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Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                                                                                                  OHNO S.,
                                                                                                                                                                                                                                                                                            CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           79830
                                                                                                                                                                                     N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₹,
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Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BY SI
SITE
SITE
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SITE 2 (PROBABLE).
ANCESTRAL CALCIUM SITE
ANCESTRAL CALCIUM SITE
                                                                                                                                                                                                                                   EMORI
                                                                                                                                                                                                                                                                                            VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
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                                                                                                                                                                                                                                Υ.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A (IN REF. 2).
3 (IN REF. 2).
5 (IN REF. 2).
57F2B CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; L; 3.26e+00; 0;
                                                                                                      ACTIVATED
                                                                                                                                                                                                                                                                                                                                                                                                   700
                                                                                                                                                                                                                                  KAWASAKI
                                                                                                                                                                                                                                                                                                                                                                                                   A
                                                                                                                                                                                                                                                                                          TETRAPODA;
                                             FORMS: CALPAIN I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 700;
                                                                                                      ВΥ
                                                                                                                                                                                                                                  Η.,
                                                                               AND A SMALL
                     CA++ REQUI
                                                                                                      MILIMOLAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
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                                                                                                                                                                                                                                   SUGIHARA
                                                                                                                                                                                                                                                                                                                                        (CALCIUM-ACTIVATED
                                                                                                                                                                                                                                                                                            MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (POTENTIAL).
                                  REQUIRING),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
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Best Local S
Matches
                                          Matches
                                                             Query Match
                                                                                 NON_TER
DISULFID
DISULFID
SEQUENCE
                                                                                                                           PROSITE; F
CYTOKINE;
                                                                                                                                                      TISSUE-KIDNEY;

REDLINE; 95034774.

PROOST P., WUYTS A., LENAERTS J.-P., VAN DAMME J.;

BIOCHEMISTRY 33:13406-13412(1994).

-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,

NEUTROPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. AL

THE RELEASE OF GELATINASE B. THIS PROTEIN CAN BIND HEP

-i- PIM: THE N-TERMINAL IS BLOCKED.

-I- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CA_BIND
CA_BIND
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DOMAIN
ACT_SITE
ACT_SITE
ACT_SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; M23254; G511637; -.
EMBL; J04700; G463086; -.
PIR; A31218; A31218.
MIM; 114230; -.
                                                                                                                                                                                                                                                                                    BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                          01-FEB-1995 (REL. 31, CREATED)
01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1B (MCP-1B) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                            P80343;
01-FEB-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; PS00640;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE; PS00018; PROSITE; PS00139;
                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                              EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                 MCPB_BOVIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DOMAIN
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                     48
                                                     Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIMILARITY: BELONGS TO PEPTIDASE FAMILY C2; ALSO KNOWN AS THE CALPAIN FAMILY OF THIOL PROTEASES.
                                                                                                                                                                                                                                                                                                                                                                             13
                                                                                                                                                                                                                                                                                                                                                                                                                       EICADP 85
  EICADP
                      EICAEP 53
                                                                                                                                                                                                                                                                                                                                                                                                           EICADP
                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity 6; Conser
                                                                                                                                        (CHEMOKINE
PS00472; SA
                                                                                                                             CHEMOTAXIS; HEPARIN-BINDING.
                                                                                                                                                                                                                                                                              ARTIODACTYLA.
  o,
                                                                                   74 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              700
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larity 100.0%;
Conservative
                                          Conservative
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                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; EF_HAND; 2.
; THIOL_PROTEASE_CYS; 1.
; THIOL_PROTEASE_HIS; FALSE_NEG.
; THIOL_PROTEASE_ASN; FALSE_NEG.
; PROTEASE; CALCIUM_BINDING; MULT.
                                                                                                                                     SMALL_CYTOKINES_CC;
                                                                                    8360 MW;
                                                                                                                                                 3
                                                    97.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IV, CALCIUM-BINDLING.
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
SITE 1 (PROBABLE).
SITE 2 (PROBABLE).
SITE 2 (PROBABLE).
ANCESTRAL CALCIUM SITE 3
ANCESTRAL CALCIUM SITE 4
S -> G (IN REF. 2).
VD -> IE (IN REF. 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ₹;
                                        Score 43;
Pred. No. 1; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 44;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred.
                                                                                 BY SIMILARITY.
BY SIMILARITY.
66172F08 CRC32;
                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ? -> IE (IN REF.
97158E66 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGULATION OF PROTEASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          THIOL PROTEASE.
                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 1; L;
3.26e+00;
                                                     5.42e+00
                                                                                                                                                                                                                                                                                                                                                                   74
                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                            BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 700;
                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                               74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (POTENTIAL)
                                                                                                                                                                                 HEPARIN.
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                                                                                                                                                                                         ALSO INDUCES
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                                          Gaps
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HERE SEED OF S
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                                                                                                      -:- PTM: O-GLYCOSYLATED (PROBABLE).
-:- INDUCTION: BY TWE-ALPHA, IL-1-ALP;
-:- SIMILARITY: BELONGS TO THE INTERC.
C-C) (CHEWOKINE CC).
EMBL; U46573; G1280141; --
EMBL; U34780; G1185440; --
EMBL; U34780; G11852241; --
EMBL; D49372; G1552241; --
EMBL; D49372; G1552241; --
EMBL; D49372; B251278; --
EMBL; Z75668; E251279; --
EMBL; Z75668; E251279; --
EMBL; Z75669; E251289; --
EMBL; Z75669; E251289; --
EMBL; Z92709; E329504; --
EMBL; Z92709; E329504; --
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HEIN H., S
BARTELS J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EOTA_HUMAN
P51671; P508
01-OCT-1996
01-OCT-1996
                                                                                                                                                                                                                                                                                                                                                                                       BIOCHEM. BIOPHYS. RES. COMMUN. 237:537-542(1997).

-i- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS,
-i- DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, /
FEATURE OF ALLERGIC INFLAMMATORY REACTIONS.

-i- SUBCELLULAR LOCATION: EXTRACELLULAR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-NOY-1997 (REL. 35, LAST ANNOTATION UPDATE)
ECTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BARTELS J., SCHLUETER CHRISTOPHERS E., SCHRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KITAURA M., NAKAJIMA T., IMAI T., HARADA S., COMBADIERE C., TIFFANY H.L., MURPHY P.M., YOSHIE O.; J. BIOL. CHEM. 271:7725-7730(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HOMO SAPIENS (HUMAN)
EUKARYOTA; METAZOA; CHORDATA;
                                        PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FISSUE-LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GARCIA-ZEPEDA E.A., ROTHENBERG M.E., MORTON C.C., LUSTER A.D.; GENOMICS 41:471-476(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GARCIA-ZEPEDA E.A., MORTON C.C., LUSTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE-PLACENTA;
MEDLINE; 97312708.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BIOCHEM. BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAT. MED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LUSTER A.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GARCIA-ZEPEDA E.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EUTHERIA; PRIMATES.
                          INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FISSUE-FORESKIN;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97445071.
SCHLUETER C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96205964.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2:449-456(1996).
  RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INTESTINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JUETER C., R
SCHROEDER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97:604-612(1996).
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POLYMORPHISM.
POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KULKE R., CHRISTOPHERS E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RICHTER E.,
                                                                                                                                                                                                                                                                                                                         IL-1-ALPHA AND INTERFERON HE INTERCRINE BETA FAMILY (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERTEBRATA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              225:1045-1051(1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60-65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WEREMOWICZ S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OWNBEY T.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AND
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            75-88, AND VARIANTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
N
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                                             SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SCHROEDER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LEDER P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WANG J., KASSAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SARAFI M.N.,
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                                                                                                                                                                                                                                                                                                                       N GAMMA.
(SMALL CYTOKINE
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                                                                                                                                                                                                                                                                                                                                                                                                                                       THIS PROTEIN
A PROMINENT
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I RESULTATION OF THE PROPERTY 
       RESULT
ID MC
AC P8
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                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
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DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TIT 15

MCPL_PIG

P42831;

01-NOV-1995

01-NOV-1995

15-JUL-1998

MONOCYTE CHEI
MCP2_HUMAN STANDARD; PRT; 99 AA.
P80075; P78388;
01-DEC-1992 (REL. 24, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCPCHEMOATTRACTANT PROTEIN 2) (HC14).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VARIANT
VARIANT
VARIANT
SEQUENCE
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DISULFID
DISULFID
VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. MEDLINE; 94183284. HOSANG K., KNOKE I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                      MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CYTOKINE; CHEMOTAXIS; SIGNAL 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NEUTROPHILS.
-!- SUBUNIT: MONOMER OR
-!- SIMILARITY: BELONGS
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUBMITTED (JUL-1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE-BRAIN;
ZACH O.R.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BIOCHEM. BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SCYA2
                                                                                                                                                                                                                                                                                                                                                                                                                                            CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                              73 EICAEP
||||:|
1 EICADP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  71 DICADP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EICADP
                                                                                                                                                                                                                                                                                                                                                                                                                                                   C) (CHEMANDER)
248479; 6683717; -.
X79416; 68872313; -.
X79416; 68872313; -.
X79416; SEGVATA CYTOKINES_CC; 1.
ITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       995 (REL. 32, CREATED)
995 (REL. 32, LAST SCUENCE UPDATE)
998 (REL. 36, LAST ANNOTATION UPDATE)
998 (REL. 36, LAST ANNOTATION (MCP-1).
                                                                                                                                                                                                                                                                                                                                                 99
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AA;
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larity 83.3%;
Conservative
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                                                                                                                                                                                                                                                                                                                                               10976 MW;
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57
73
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10732
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75
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99
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HOMODIMER; IN EQUILIBRIUM (BY TO THE INTERCRINE BETA FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WW.
                                                                                                                                                                                                                                                                    Score 43;
Pred. No.
1; Misma
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BY SIMILARITY.

BY SIMILARITY:

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A -> T (IN CLONE 5

R -> S (IN CLONE 5

K -> R (IN CLONE 3)

K -> R (IN CLONE 3)
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BY SIMILARITY.
BY SIMILARITY.
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Pred. No. 5.42e+00;
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MONOCYTE CHEMOTACTIC PROTEIN 1.

CARBOXYLIC ACID (BY
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                                                                                                                                                                                                                                                                                                                                               ECC3AFB4 CRC32;
                                                                                                                                                                                                                                                                        Mismatches
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                                                                                                                                                                                                                                                                                                         DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             53).
53).
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                                                                                                                                                                                                                                                                        Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (SMALL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCHEIT K.H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BUT
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                                                                                                                                                                                                                                                                      Gaps
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(MCP-2)

(MONOCYTE

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                                  RESULT
                                                                                                                      Query Match
Best Local
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MCP2_PIG
P49873;
01-OCT-1996
                                                                                                                                                                  MOD_RES
DISULFID
DISULFID
VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                  KIM K.-S.,
FEBS LETT.
                                                                                                                                                                                                                                                                                                   EMBL;
                                                                                                                                                                                                                                                                              EMBL;
HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VAN COILLIE E., FITEN P., I
VAN DAMME J., OPDENAKKER G
GENOMICS 40:323-331(1997).
                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                CYTOKINE;
                                                                                                                                                                                                                                                           PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBUNIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE: 92308855.

VAN DAMME J., PROOST P., LENAERTS
J. EXP. MED. 176:59-65(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHANG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE; 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 23-99 FROM MEDLINE; 91207938.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE-BONE MARROW;
MEDLINE; 97224420.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SCYAB OR SCYA10 OR M
HOMO SAPIENS (HUMAN)
EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                    POLYMORPHISM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 97053697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BIOCHEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CISSUE=OSTEOSARCOMA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INT. IMMUNOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AN AELST I., VAN DAMME T
                                                                  1 EICADP
                                                                                        73 EVCADP 78
                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                       FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCY, BASOPHILS AND EOSINOPHILS. MAY PLAY A ROLE IN NEOPLASIA AND INFLAMMATORY HOST RESPONSES THIS PROTEIN CAN BIND HEPARIN. SUBUNIT: MONOMER OR HOMODINER; IN EQUILIBRIUM.

SUBUNIT: MONOMER OR HOMODINER; IN EQUILIBRIUM.

TISSUE SPECIFICITY: HIGHEST EXPRESSION FOUND IN THE SMALL INTESTINE AND PERIPHERAL BLOOD CELLS. INTERMEDIATE LEVELS SEEN THE HEART, PLACENTA, LUNG, SKELETAL MUSCLE, THYMUS, COLON, OVAL SPINAL CORD AND PANGREAS. LOW LEVELS SEEN IN THE BRAIN, LIVER, SPINAL CORD AND PANGREAS. LOW LEVELS SEEN IN THE BRAIN, LIVER, SPINAL CORD AND PANGREAS. LOW LEVELS SEEN IN THE BRAIN, LIVER, SPINAL CORD AND PANGREAS. TO THE INTERCRINE BETA FAMILY (SMALL CYTOK.)

SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOK.)
                                  17
                                                                                                                                                                                                                                                                              P13500; 1MCA.
                                                                                                                                                                                                                                                                                        -C) (CHEMOKINE CC)
X99886; E279930;
Y10802; E294088;
                                                                                                                                                                                                                                               PS00472; SMALL_CYTOKINES_CC; CHEMOTAXIS; SIGNAL; HEPARIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SCYA10 OR MCP2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97237052.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  RAJARATHNAM K., C
395:277-282(1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USH
                                                                  σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-99
(REL. 34, CREATED)
                                                                                                                                                                   695441
                                                                                                              Conservative
                                                                                                                                                        AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3U F., FREEMAN G
1:388-399(1989)
                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FROYEN F., NOMIYAMA H., MIURA R., EITEN P.,
AN DAMME J., OPDENAKKER G.;
S. RES. COMMUN. 231:726-730(1997).
                                                                                                                                                        11246 MW;
                                                                                                                      95.5%;
83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                   23
24
59
59
59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AND VARIANT GLN-69
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                                                                                                                                                                                                                                                                                                  ALT_INIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NOMIYAMA H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLARK-LEWIS
                                                                                                          Score 42;
Pred. No.
1; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    G.J.,
                                                                                                                                                                 PROBABLE.

MONOCYTE CHEMOTACTIC PROTEIN 2.

PYRROLIDONE CARBOXYLIC ACID.

BY SIMILARITY.

BY SIMILARITY.

K -> Q.
                                                                                                                                                                                                                                            INES_CC; 1.
HEPARIN-BINDING;
                                                                                                                                                        5DDD5C20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GLN-69
                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  J.-P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GRIFFIN
                                                                                                                      DB 1; I
8.95e+00;
                      99
                                                                                                                                                        CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ι.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SAKAKI Y., MIURA R., YOSHIE
                      æ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OPDENAKKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    J.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                             SYKES
                                                                                                           0
                                                                                                                                Length 99;
                                                                                                                                                                                                                                             INFLAMMATORY RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REINHERZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                            B.D.;
                                                                                                             Indels
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::
                                                                                                                                                                                                                                                                                                                                                                                                                                      LYMPHOCYTES,
                                                                                                          0;
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                                                                                                                                                                                                                                                                                                                          CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                     SEEN IN
                                                                                                           Gaps
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RESULT PROCESS OF THE PROCESS OF THE
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Best Local S
Matches
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-:- FUNCTION: CHEMOTACTIC
CAN BIND HEPARIN.
-:- SUBUNIT: MONOMER OR H
-:- SIMILARITY: BELONGS T
DISULFID
DISULFID
CARBOHYD
SEQUENCE
                                                                                                                                                                                                           PROSITE;
CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                            -:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MCP1_AVPO STANDARD; PRT; 120 AA.

Q08782;
Q1-NOV-1995 (REL. 32, CREATED)
Q1-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1)
CHEMOAITRACTANT PROTEIN-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
DISULFID
SEQUENCE
                                                                                                                               CHAIN
MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-007-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOTYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP
CHEMOATTRACTANT PROTEIN 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN-Z; TISSUE-SPLEEN; MEDLINE; 93267104.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE;
                                                                                                                                                                                                                                                                  EMBL;
                                                                                                                                                                                                                                                                                                                NEUTROPHILS.
-!- SUBUNIT: MONOMER OR
-!- SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAVIA PORCELLUS (GUINEA PIG).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCYA2 OR MCP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUS SCROFA (PIG).
EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                YOSHIMURA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HOSANG K.K., KNOKE SCHEIT K.K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SCYA8 OR MCP2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73 EVCADP
|:||||
1 EICADP
                                                                                                                                                                                                                                                                                                                                                                                            IMMUNOL. 1 FUNCTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18
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FE; PS00472; SMAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95091716.
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                                                                                                                                                                                                                                                                                        (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; METAZOA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CHEMOKINE CC).
                                                                                                                                                                                                         CHEMOTAXIS; SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OCHEMOTAXIS; SIGNAL; HEPARIN-BINDING;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ARTIODACTYLA.
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larity 83.3%;
Conservative
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75
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                                                                                                                                                                                                                                                                                                             HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY) TO THE INTERCRINE BETA FAMILY (SMALL CYTO
                                                                                                                                                                                                         CYTOKINES_CC; 1.
[GNAL; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
TO THE INTERCRINE BETA FAMILY (SMALL CYTOK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KLAUDINY J.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ME.
     ₩.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MMUN. 205:148-153(1994).
FACTOR THAT ATTRACTS MONOCYTES.
                     BY SIMILARITY.

MONOCYTE CHEMOTACTIC PROPYRROLIDONE CARBOXYLIC PSIMILARITY.

BY SIMILARITY.

BY SIMILARITY.

BY SIMILARITY.

POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 42;
Pred. No.
1; Misma
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BY SIMILARITY.
B7620BCF CRC32
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PYRROLIDONE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BY SIMILARITY MONOCYTE CHEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERTEBRATA;
22FAD257 CRC32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRECURSOR (MCP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; L
8.95e+00;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHEMOTACTIC PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                            ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WEMPE F.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CARBOXYLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -2) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFLAMMATORY RESPONSE
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                                                                                                                                                          PROTEIN
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                                                                                                                                                                                                              GLYCOPROTEIN.
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                                                                                                                               (BY
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Best Local S
Matches
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DISULFID
CARBOHYD
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ROLLINS B.J.,
PROC. NATL. AC
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01-MAR-1989 (REL. 10, CREATED)
01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN PROCURSOR (MCP-1) (PLATELET-DERIVED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE;
                                                                                                                                                                                                                                                                                                                                                   SIGNAL
CHAIN
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MIP4_HUMAN
                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PIR; A30209; A30209.
PIR; A30861; A30861.
PIR; S16226; S16226.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; J04467; G387169; -.
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VAN DAMME J., DECOCK B., BERTINI R., PUT W., OPDENAKKER G., MANTOVANI A.; EUR. J. BIOCHEM. 199:223-229(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 26-42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KAWAHARA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SCYA2 OR MCP1 OR JE
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                                                                                                                                                                                                                                                                                                                               MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                            MGD; MGI:98259; SCYA2
PROSITE; PS00472; SMA)
                                                                                                                                                                                                                                                                                                                                                                                           YTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          71
                                                                                                                73 EVCADP 78
                                                                                                                                                        Local Similarity es 5; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WAHARA R.S., DEUEL T.F.;
BIOL. CHEM. 264:679-682(1989).
                                                                          1 EICADP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 EICADP 6
                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
INDUCTION: BY PLATELET-PERIVED GROWTH FACTOR.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NEUTROPHILS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EVCADP 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                    P13500;
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89093129.
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35
126
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  STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                          SMALL_CYTOKINES_CC; 1.
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75
126
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148
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83.3%;
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Pred. No.
1; Misma
                                                                                                                                                      Pred.
                                                                                                                                                                        Score 42; DB 1; I
Pred. No. 8.95e+00;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STILES C.D.;
. 85:3738-3742(1988).
                                                                                                                                                                                                                                                                       BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                               SIMILARITY)
                                                                                                                                                                                                                                                                                                                             MONOCYTE CHEMOTACTIC PROTEIN PYRROLIDONE CARBOXYLIC ACID
                                                                                                                                                                                                                                                                                                                                                                     INFLAMMATORY RESPONSE; GLYCOPROTEIN. BY SIMILARITY.
                                                                                                                                                                                                                                                       POTENTIAL.
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  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                 B7572BBC CRC32;
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                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CONINGS R., LENAERTS J.-P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         148
  89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TETRAPODA;
                                                                                                                                                                                        Length 148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 120;
                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                             ROTEIN 1.
ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BUT NOI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                    Gaps
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                                                                                                                                                                          RESULT
                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches
                                                                                                                                                                                                                                                                                                                                      DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-UTL-1998 (REL. 35, LAST SEQUENCE UPDATE)
15-UTL-1998 (REL. 35, LAST SEQUENCE UPDATE)
16-UTL-1998 (REL. 36, LAST SEQUENCE UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 4 PRECURSOR (MIP-4) (PULMONARY AND ACTIVATION REGULATED CHEMOKINE) (CC CHEMOKINE PARC) (ALTERNATIVE ACTIVATED MACROPHAGE ASSOCIATED CC CHEMOKINE 1) (AMAC-1).
                                                                                   MIT 21
PFO 21
P50230;
P50230;
01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                              CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WELLS T.N.C., PEITSCH M.C.;

J. LEUKOC. BIOL. 61:345-550(1997).

J. LEUKOC. BIOL. 61:345-550(1997).

J. LEUKOC. BIOL. 61:45-550(1997).

J. LEUKOC. BIOL. 61:45-550(1997).

J. LEUKOC. BIOL. 61:45-550(1997).

MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN INTO B CELL FOLLICLES IN LYMPH MODES.

J. LEVEL EXPRESSION IS SEEN IN LYMPHOID TISSUES

LEVEL EXPRESSION IS SEEN IN LYMPHOID TISSUES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
KODELJA V., MUELLER C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
TISSUE-AORTA, AND LUNG;
MEDLINE; 97376836.
HIESHIMA K., IMAI T., BABA M., SHOUDAI K., ISHIZUKA K.,
NAKAGAWA T., TSURUTA J., TAKEYA M., SAKAKI Y., TAKATSUKI K.,
MIURA R., OPDENAKKER G., VAN DAMME J., YOSHIE O., NOMIYAMA H
J. IMMUNOL. 159:1140-1149(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
EUTHERIA; PRIMATES.
                           RATTUS NORVEGICUS (RAT).
EUKARYOTA; METAZOA; CHOR
EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; AB000221; D1022520; -.
EMBL; Y13710; E321838; -.
PROSITE; PS00472; SMALL_CYTO
                                                                        SCYA4 OR MIP1B
                                                                                                                                                                                                                                                                                                                                                                                                            CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               THYMUS AND APPENDIX.
-I- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS)
-I- SIMILARITY: BELONGS TO THE INTERCRINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KODELJA V., MUELLER (
SUBMITTED (AUG-1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PATENT NUMBER US5504003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
LI H., RUBEN S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SCYA18 OR MIP4
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISCUSSION OF SEQUENCE.
                                                                                                                                                                                                                                                68 QICADP 73
                                                                                                                                                                                                                    1 EICADP
                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CHEMOKINE CC)
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31
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A
                                                                                                                                                                                                                                                                                                                                                                                                           SMALL_CYTOKINES_CC; 1.
XIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                       9849 MW;
                                                                                                                                                                                                                                                                                          93.2%;
                                          CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                    54
54
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       POLITZ O., HAKIY N., ORFANOS C.E., EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                          Score 41; DB 1; I
Pred. No. 1.46e+01;
                                                                                                                                                                                                                                                                                                                                    MACROPHAGE INFLAMMATORY PROTEIN
BY SIMILARITY.
BY SIMILARITY.
052AA3DC CRC32;
                                                                                                                                                                                                                                                                              <u>س</u>ر
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERTEBRATA; TETRAPODA; MAMMALIA;
                                        VERTEBRATA;
                                                                                                                                                                                                                                                                              Mismatches
                                           TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                      Length 89;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LYMPHOCYTES BUT NOT IN B CELL MIGRATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IN THE LUNG. A LOWER SUCH AS LYMPH NODES,
                                                                                      (MIP-1-BETA).
                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GOERDT
                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DЬ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 95298037.
SHI M.M., GODLESTT SHIP
   CHAIN
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                 NAKAGAWA H., SHIOTA S., TAKANO K., SHIBATA F., KATO H.;
BIOCHEM. BIOPHYS. RES. COMMUN. 220:945-948(1996).

-I- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
HAS CHEMOTACTIC ACTIVITY FOR MONOCYTES, NEUTROPHILS, EOSINOPHILS;
BASOPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG TNF-ALPHA
PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AND
MAY FUNCTION AS AN AUTOCKIME MEDIATOR FOR THE MACROPHAGE
PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR
ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFLUX. THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MI1A_RAT
P50229;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID
                                                                                                                                                          EMBL; U22414; G790633;
EMBL; U06435; G459150;
PROSITE; PS00472; SMALI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR
                                                                                               SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE; 95238980.
SHANLEY T.P., SCHMAL H., FRIEDL
J. IMMUNOL. 154:4793-4802(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN-LONG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BIOCHEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RATTUS NORVEGICUS (RAT).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SCYA3 OR MIP1A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN-LONG EVANS; TISSUE-LUNG;
JONES M.L., SHANLEY T.P., SCHWAL H., FRIEDL H.P., WARD P.A.;
SUBMITTED (FEB-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
-!- SUBUNIT: HOMODIMER (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                               CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE OF 24-57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               72 QICADP 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 EICADP
                                                                                                                                                                                                                                                     INDUCTION: BY LIPOPOLYSACCHARIDE (LPS) SIMILARITY: BELONGS TO THE INTERCRINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0-0
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-C) (CHEMOKINE CC).

-C) (CHEMOKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ONG EVANS;
95238980.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96183056
                                                                                                                         PS00472; SMALL_CYTOKINES_CC; 1. CHEMOTAXIS; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                    HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GODLESKI J.J., PAULAUSKIS J.D.;
BIOPHYS. RES. COMMUN. 211:289-295(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         92
      354
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                                                                                                                                                                                              G459150; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ŖΑ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE-LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10234
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74
      23
92
57
73
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 41; DB 1;
Pred. No. 1.46e+01
1; Mismatches
MACROPHAGE INFLAMMATORY
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MACROPHAGE INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JONES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92
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                                                                                                                                                                                                                                                                            BETA FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            M.L.,
                                                                                                                     SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WARD P.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MIP-1-ALPHA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                            HEPARIN-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MAMMALIA;
                                                                 PROTEIN 1-ALPHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROTEIN 1-BETA.
                                                                                                                                                                                                                                                                                      (SMALL
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                                                                                                                                                                                                                                                                                      CYTOKINE
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15-JUL-1998 (REL. 3
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CONFLICT
SEQUENCE
  KLENK H.-P., CLAYTON R.A., TOMB J.-F., V
KETCHUM K.A., DODSON R.J., GWINN M., HIC
RICHARDSON D.L., KERLAVAGE A.R., GRAHAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MCP2_BOVIN
Q09141;
                                                                   WEDLINE; 98049343.
                                                                                                                                                                                                              ALAS OR AF2255.
ARCHAEOGLOBUS FULGIDUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                        ARCHAEBACTERIA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; S67954; E118856; EMBL; S67956; G544997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAN BIND HEPARIN.
-!- SUBUNIT: MONOMER OR F
-!- SIMILARITY: BELONGS:
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA CELL BIOL. 13:1-8(1994).
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-UL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
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WEMPE F., HANES J.
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                                                                                                                                     EQUENCE FROM
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larity 83.3%;
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                                                                                                                                     N.A.
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                                                                                                                                                                                      EURYARCHAEOTA;
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TO THE INTERCRINE BETA FAMILY (SMALL CYTO
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                                                                                                         ATCC 49558,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FACTOR THAT ATTRACTS MONOCYTES.
                                                                                                                                                                                                                                                               SEQUENCE UPDATE)
ANNOTATION UPDATE;
6.1.1.7) (ALANINE--TRNA
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Pred. No.
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Pred. No. 1.46e+01
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BY SIMILARITY.
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BY SIMILARITY.
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                                                                                                                                                                                        ARCHAEOGLOBALES;
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., WHITE O., NELSON K.E.,
HICKEY E.K., PETERSON J.
HAM D.E., KYRPIDES N.C.,
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                           J.D.,
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P53574;
01-OCT-1996
01-OCT-1996
01-NOV-1997
       GALLUS GALL EUKARYOTA;
                                                                   MI1B_CHICK STANDARD; PRT; 90 AA. 090826; 01-NOV-1997 (REL. 35, CREATED) 15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE) MACROPHAGE INFLAMMATORY PROTEIN 1-BETA HOMOLOG PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FLEISCHMANN R.D., OUACKENBUSH J., LEEN.H., SUTTON G.G., GILL S., KIRKNESS E.F., DOUGHERTY B.A., MCKENNEY K., ADAMS M.D., LOFTUS B., PETERSON S., REICH C.I., MCNEIL L.K., BADGER J.H., GLODEK A., ZHOU OVERBEER R., GOCAYME J.D., WEIDMAN J.F., MCONALD L., UTTERBACK T., COTTON M.D., SPRIGGS T., ARTIACH P., KARINE B.P., SYKES S.M., SADOW P.W., D'ANDREA K.P., BOMMAN C., FUJII C., GARLAND S.A., MASSON T.M., OLSEN G.J., FRASER C.M., SMITH H.O., WOESE C.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ELECTRON TRANSPORT; FAD; NITROGEN FIXATION.

NP_BIND 293 321 FAD (ADP PART) (P
SEQUENCE 360 AA; 39030 MW; 044091DA CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FIXATION.

-:- SUBUNIT: FIXA AND FIXB FORM A HETERODIMER (PROBABLE)
-:- SIMILARITY: BELONGS TO THE ETF ALPHA-SUBUNIT / FIXB
EMBL; X65515; G510486; -.

PROSITE; PS00696; ETF_ALPHA; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-ATCC 478;
WIENTIJENS R., VAN DONGEN W., HAAKER H.;
SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: MAY PLAY A ROLE IN A REDOX PROCESS INVOLVED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE; PS00179; AA_TRNA_LIGASE_II_1; FALSE_NEG.
PROSITE; PS00339; AA_TRNA_LIGASE_II_2; FALSE_NEG.
AMINOACYL-TRNA_SYNTHETASE; PROTEIN BIOSYNTHESIS; LIGASE; ATP-BINDING-
SEQUENCE 906 AA; 102536 MW; 54E57B4C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -!- SUBCELLULAR LOCATION: CYTOPLASMIC.
-!- SIMILARITY: BELONGS TO CLASS-II AMINOACYL-TRNA
EMBL; AE00949; G2648270; -.
TIGR; AF2255; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VENTER J.C.;

NATURE 390:364-370(1997).

-!- CATALTIC ACTIVITY: ATP + L-ASPARTATE +
-YROPHOSPHATE + L-ASPARTYL-TRNA(ASP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AZOTOBACTER VINELANDII. PROKARYOTA; GRACILICUTES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AZOTOBACTERIACEAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FIXB PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      38 EICGDP 43
|||:||
1 EICADP 6
                                                                                                                                                                                                                                                                                                                                                                                                                                  72 EICGEP 77
|||::|
1 EICADP 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                           GALLUS (CHICKEN)
           METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (REL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               34, CREATED)
34, LAST SEQUENCE UI
35, LAST ANNOTATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          90.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  93.2%;
CHORDATA; VERTEBRATA; TETRAPODA; AVES; NEOGNATHAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCOTOBACTERIA; AEROBIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 40; DB 1; 1
Pred. No. 2.38e+01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 41; DB 1;
Pred. No. 1.46e+01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TRNA(ASP) -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 360;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 906;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RODS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SYNTHETASE FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AND COCCI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IN NITROGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
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Best Local Similarity
Matches 4; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE; 89093958. BROWN K.D., ZURAWSK J. IMMUNOL. 142:679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -!- SIMILARITY: BELONGS TO THE INTERCICCO) (CHEMOKINE CC).
EMBL; L34553; G509596; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC;
CYTOKINE; CHEMOTAXIS; SIGNAL.
                                                 SEQUENCE FROM N.A.
MEDLINE; 91061800.
BAIXERAS E., ROMAN-ROMAN S., JITS
VIEGAS-PEQUIGNOT E., HERCEND T.,
MOL. IMMUNOL. 27:1091-1102(1990).
                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.

MEDLINE; 89140347.

ZIPFEL P.F. BALKE J., IRVING S
J. IMMUNOL. 142:1582-1590(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 14-90 FROM N.A. PETRENKO O., ENRIETTO P.J.; DETRENKO P.J.; DETRENKO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-BONE MARROW;
MEDLINE; 95369710.
PETRENKO O., ISCHENKO I.,
GENE 160:305-306(1995).
                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. MEDLINE; 89071764. LIPES M.A., NAPOLITANO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GALLIFORMES
[1]
TISSUE-T-CELL;
                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                   PROC. NATL.
                                                                                                                                                                                                                                                                                                                                                                                                                                             EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      70 EVCANP 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EICADP
                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       90 AA;
                                                                                                                                                              ZURAWSKI S.M., MOSMANN 142:679-687(1989).
                                                                                                                                                                                                                                                                                                                                                     ACAD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22
32
33
87
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                                                                                                                                                                                                                                                                                                                                                   SCI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9969 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 88.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
90
56
72
87
                                                                                                                                                                                                                                                                                                                                                 O.S.
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                                                                                                                                                                                                                                                                                                                                                 JEANG K.-T., CHANG N.T., A. 85:9704-9708(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIMILARITY).
THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY.

MACROPHAGE INFLAMMATORY F
BY SIMILARITY.
BY SIMILARITY.
L -> M (IN REF. 2).
B5637084 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 39; DB 1; 1
Pred. No. 3.82e+01;
2; Mismatches 0
                                                                      JITSUKAWA S., G
T., TRIEBEL F.;
                                                                                                                                                                                                                                                                         s.G.,
                                                                                                                                                                                   T.R.,
                                                                                                                                                                                                                                                                             KELLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>بــ</u>ـــ
                                                                                                                                                                                 ZURAWSKI G.
                                                                                                                                                                                                                                                                             .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              TETRAPODA;
                                                                                       GENEVEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                             SIEBENLIST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                       <u>ر</u>
                                                                                                                                                                                                                                                                                                                                                                     LEONARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                              MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROTEIN
                                                                                         MECHICHE
                                                                                                                                                                                                                                                                           ٥.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROPERTIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                   W.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                     Query Match
Best Local S
Matches
                                                                                                                                                                                                                                                                                                                      C-C) (CHEMOKINE CC).

EMBL; M23502; G533213; -.

EMBL; M25316; G602455; -.

EMBL; M25316; G602455; -.

EMBL; X53683; G34218; -.

EMBL; X53683; G34218; -.

EMBL; X53682; E35870; ALT_SEQ.

EMBL; X53682; E35870; ALT_SEQ.

EMBL; M69203; G1332376; -.

EMBL; M69201; G1332376; JOINED.

EMBL; M69202; G1332376; JOINED.

EMBL; M69202; G1332376; JOINED.

EMBL; M59503; G339727; -.

PIR; B31767; A31767.

PIR; B30574; B30574.

PIR; D30552, D30552.

PIR; J10319; J10319.

PIR; A37411.

PIR; A37411.
                                                                                                      PROSITE; PROSITE; PROSITE; PROSITE; SIGNAL CHAIN DISULFID DISULFID CONFLICT CONFLICT CONFLICT CONFLICT CONFLICT CONFLICT CONFLICT CONFLICT CONFLICT STRAND STRAND
                                                                             SEQUENCE
                                                                                                TURN
                                                                                                                                                                                                                                                                                             PDB; 1HUM; 30-APR-94.
PDB; 1HUN; 30-APR-94.
MIM; 182284; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LODI P.J., GARRETT D.S., KUSCEWSKI J., TS
LEONARD W.J., GRONENBORN A.M., CLORE G.M.
SCIENCE 263:1762-1767(1994).
-!- FUNCTION: MONOKINE WITH INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
MEDLINE; 91373378.
NAPOLITANO M., MODI W.S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE; 89325421
CHANG H.C., REINHI
EUR. J. IMMUNOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE OF 6-92 FROM N.A.
MEDLINE; 90038522.
MILLER M.D., HATA S., WAAL MALEFYT
J. IMMUNOL. 143:2907-2916(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EONARD W.J.;
                                               Local Similarity
                   72 QVCADP 77
 1 EICADP 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INDUCTION: BY MITOGENS. SIMILARITY: BELONGS TO C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBUNIT: HOMODIMER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E BY NMR.
94182137
                                                                                                                                                                                                                                                                                   PS00472; SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CHEM. 266:17531-17536(1991).
                                                                                                                                                                                                                                                                          CHEMOTAXIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REINHERZ
                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HERZ E.L.;
19:1045-1051(1989).
                                               88.6%;
                                                                            10212
                                                                                      90
                                                                                                                                                                                                                                                                         INFLAMMATORY
                                                                             W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CEVARIO S.J.,
                                                                                                                                                             MACROPHAGE INFLAMMATORY PROTEIN 1-BETA.
BY SIMILARITY.
BY SIMILARITY.
C IN REF. 7).
A -> S (IN REF. 6).
P -> L (IN REF. 2).
ARKLPR -> REASS (IN REF. 3).
S -> I (IN REF. 7).
S -> G (IN REF. 7).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                THE
                                    Score 39; DB 1; 1
Pred. No. 3.82e+01
2; Mismatches (
                                                                           F18E7AFD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INTERCRINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₽.,
                                                                                                                                                                                                                                                                        RESPONSE; SIGNAL; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TSANG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KRANGEL M.S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GNARRA J.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHEMOKINETIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         M.L.S.,
                                                      Length 92;
                                     0;
                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEUANEZ H.N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WEATHERBEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROPERTIES
                                    0;
                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         J.A.,
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PERSONAL PRESENCE OF A SAME AND A
RESULT
ID MI
AC PI
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                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 4; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C-C) (CHEMOKINE CC).

EMBL; D00044; D1000469; -.

EMBL; M23452; G188559; -.

EMBL; M25315; G602433; -.

EMBL; X03754; G758089; -.

EMBL; X03178; G34297; ALT_SEQ.

EMBL; M23178; G182847; -.

EMBL; D90144; G219906; -.
MI10_HUMAN
P16619;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MIIA_HUMAN STANDARD; PRT; 92 AA.

P10147;
01-MAR-1989 (REL. 10, CREATED)
01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHEZ INFLAMMATORY PROTEIN 1-ALPHA PROTEIN)
(TONSILLAR LYMPHCCYTE LD78 ALPHA PROTEIN) (G0S19-1 PROTEIN) (PAT 464.1) (SMALL INDUCIBLE CYTOKINE A3).

SCYA3 OR MIPIA.

SCYA3 OR MIPIA.
                                                                                                                                                                                                                                                                                                                                   DISULFID DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                     HSSP; P13
MIM; 1822
PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAKAO M., NOMIYAMA H., SHIMADA K.;
MOL. CELL. BIOL. 10:3646-3658 (1990).
MOL. CELL. BIOL. 10:7646-3658 (1990).
-I- FUNCTION: MONKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
-I- INDUCTION: BY TPA OR PHA (TPA = 12-O-TETRADECANOYL PHORBOL-13
ACETATE (TUMOR PROMOTER); PHA = PHYTOHEMAGGLUTININ (T-CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA CELL
                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                         SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE; 90287155.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
MEDLINE; 91103879.
BLUM S., FORSDYKE R.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                 CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PIR; A24198; A24198.
PIR; A30574; A30574.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -1- SIMILARITY: LD78-ALPHA AND
-1- SIMILARITY: BELONGS TO THE
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE: 89140347.
MEDLINE: 89140347.
ZIPFEL P.F., BALKE J., IRVING S.O.
J. IMMUNOL. 142:1582-1590(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLLIE; 86223879.
OBARU K., FUKUDA M., MAEDA S.,
J. BIOCHEM. 99:885-894(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA;
                                                                                                                                                 71 QVCADP 76
                                                                                                                      \vdash
                                                                                                                      EICADP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P13236; 1HUM.
                                                                                                                                                                                                                                                                                                                                                                                                                        PS00472; SMALL_CYTOKINES_CC; 1.
; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BIOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIMATES
                                                                                                                                                                                                                                                                                                             92
                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                             A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  YKE R.E., FORSDYKE 9:589-602(1990).
                        STANDARD;
                                                                                                                                                                                                                                                                                                             10085 MW;
                                                                                                                                                                                                                                     88.6%;
                                                                                                                                                                                                                                                                                                                                        92
57
73
                                                                                                                                                                                                             Score 39; DB 1;
Pred. No. 3.82e+
2; Mismatches
                                                                                                                                                                                                                                                                                                                                 POTENTIAL.
MACROPHAGE INFLAMMATORY
BY SIMILARITY.
BY SIMILARITY.
                           PRT;
                                                                                                                                                                                                                                                                                                             C24DD919
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -BETA ARE VERY CLOSELY RELATED.
INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SHIMADA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          D.R.;
                                                                                                                                                                                                                                     39; DB 1;
No. 3.82e+01
                           93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ×.
                                                                                                                                                                                                                                                                                                             CRC32;
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                                                                                                                                                                                                                                                         Length 92;
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                                                                                                                                                                                                                                                                                                                                                                                  PROTEIN 1-ALPHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MAMMALIA;
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RESULT
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AC PAC
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Best Local
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EMBL; X52149; G296666; -.
EMBL; M24110; G18.8849; -.
EMBL; D90145; G219908; -.
EIR; B3908; B30908.
PIR; B39412; B30412.
PIR; B33673; B35673.
PIR; B31673; S10157.
PIR; S10157; S10157.
                                                                                                                                                                                                                                                                                                                                                   MCPA_BOVIN STANDARD; PRT; 99 AA.
P28291;
01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1A PRECURSOR (MCP-1A) (MCP-1) (ACIDIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHAIN
DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                     SEMINAL FLUID PROTEIN).
BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE MEDLINE; BLUM S., DNA CELL [3]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-AUG-1990 (REL. 15, CREATED)
01-AUG-1990 (REL. 15, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
TONSILLAR LYMPHOCYTE LD78 BETA PROTEIN PRECURSOR (GOS19-2 PROTEIN)
(PAT 464.2).
SCYA3LL OR 464.2.
                            SEQUENCE FROM N.A.
TISSUE-SEMINAL PLASMA;
MEDLINE; 92096117
WEMPE F., HENSCHEN A., SCHEIT K.H.;
DNA CELL BIOL. 10:671-679(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-BLOOD;
MEDLINE; 90287702.
IRVING S.G., ZIPFEL P.F., BALKE J., MCBRIDE
BURD P.R., SIEBENLIST U., KELLY K.;
NUCLEIC ACIDS RES. 18:3261-3270(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HSSP; P13236; 1HUM.
MIM; 601395; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.

MEDLINE; 90287155.

NAKAO M., NOMIYAMA H., SHIMADA K.;

NAKAO M., NOMIYAMA H., SHIMADA K.;

MOL. CELL. BIOL. 10:3646-3658(1990).

MOL. CELL. BIOL. 10:3646-3658(1990).

-i- SIMILARITY: 464.1 AND 464.2 ARE VERY CLOSELY RELATED.

-i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C.C.) (CHEMOKINE CC).
   DNA
[2]
                                                                                                                                                                                                                                         EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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EUKARYOTA; METAZOA; C
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Match 88.6%;
Local Similarity 66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72 QVCADP 77
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PS00472; SMALL_CYTOKINES_CC; CHEMOTAXIS; SIGNAL.
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91103879.
FORSDYKE R.E., FORSDYKE D.R.;
BIOL. 9:589-602(1990).
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24
34
35
35
AA;
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58
74
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred.
2; 1
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BY SIMILARITY.
BY SIMILARITY.
21EDDB04 CRC32;
                                                                                                                                                                                                                                                                     VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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                                                                                                                                                                                                                                                                     TETRAPODA;
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                                                                                                                                      Search completed: Thu Job time: 11 secs.
                                                                             Query Match
Best Local S
Matches
                                                                                                                                                                                                              C-C) (CHEMOKINE CC).
EMBL; L32659; G624394; -.
EMBL; M84602; G163395; -.
PIR; A39296; A39296.
PIR; CC336; JC2336.
HSCD: D11500.
                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
TISSUE-SEMINAL PLAS
MEDLINE; 92181448.
WEMPE F., EINSPANIE
                                                                                                                   DISULFID
DISULFID
SEQUENCE
                                                                                                                                                         CHAIN
MOD_RES
                                                                                                                                                                                       PROSITE; F
                                                                                                                                                                                                                                                                                    WEMPE F., KUHLMANN J.K., SCHEIT K.H.;
BIOCHEM. BIOPHYS. RES. COMMUN. 202:1272-1279(1994).
-I- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT
                                                                                                                                                                                                                                                                                                                                        BIOCHEM. BIOPHYS. RES. COMMUN. 183:232-237(1992).
                                                                                                                                                                              SIGNAL
                                                                                                                                                                                                                                                                     NEUTROPHILS.
-!- SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE; 94338337.
                                                                                                                                                                                                          HSSP; P13500; 1MCA
                                                           73 ELCADP 78
                                       1 EICADP
                                                                                       Similarity
                                                                                                                                                                                       PS00472; SMALL_CYTOKINES_CC; CHEMOTAXIS; SIGNAL.
                                                                                                                    99
                                        σ
                                                                                                                34
35
3AA;
                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                              PLASMA;
          Apr
                                                                                                                 59
75
11114 MW;
                                                                                      88.6%;
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24
24
           μ
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           07:28:41 1999
                                                                                                              BY SIMILARITY.

MONOCYTE CHEMOTACTIC PROTEIN 1;

PYRROLIDONE CARBOXYLIC ACID (B:
SIMILARITY).

BY SIMILARITY.

BY SIMILARITY.

BY SIMILARITY.
                                                                                                                                                                                                                                                                     THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                            Score 39; DB 1;
Pred. No. 3.82e+01
1; Mismatches
                                                                                                                                                                                                 ۲
                                                                              0
                                                                                               Length 99;
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1 44 100.0 93 4 000626 2 44 100.0 700 11 054843 3 43 97.7 92 11 088430 CC CHEMOKINE ABCD-1. 1.03e+00 4 42 95.5 64 1 027064 HYPOTHETICAL 7.1 KD PR 1.71e+01 5 41 93.2 258 10 081519 T24M8 10 PROTEIN. 2.81e+01 6 41 93.2 1009 2 054567 DOTO. 2.81e+01 9 40 90.9 283 2 032439 SERINE PROTEASE PRECUR 4.59e+01 11 40 90.9 314 5 045748 T05D4.2. 2.81e+01 12 40 90.9 354 2 054395 CHYMOTRYESIN-LIKE SERI 4.59e+01 13 40 90.9 252 2 P71835 HYPOTHETICAL 60.9 KD 9 4.59e+01 14 40 90.9 2404 14 090733 POLYPROTEIN. 4.59e+01 15 39 88.6 134 4 000585 BETA CHEMOKINE EXOUDS- 7.43e+01 16 39 88.6 134 4 000585 CALPAIN 5 (CALPAIN-LIK 7.43e+01 19 38 86.4 101 5 020397 F44D12.10. 119e+02 20 38 86.4 123 11 061854 MAST CELL GROWTH FACTO 1.19e+02	Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.  SUMMARIES  Result Query  No. Score Match Length DB ID Description Pred. No.	Database: sptrembl8 1:sp_archea 2:sp_bacteria 3:sp_fung1 4:sp_human 5:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle 9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified 13:sp_vertebrate 14:sp_virus  Statistics: Mean 19.033; Variance 22.506; scale 0.846	able: PA Ga 18 essing: Mi Li	e search, using Smith 1999; MasPar time 4. 73.399 Million 9.pep	**************************************
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2 P99 2 P99					1 0293 2 0053 11 0643 11 0625 11 0625 2 2710 5 0218 10 0803 13 0421 14 0147 14 0935 11 0608 11 0608
P95084 P95084 O44711 Q54755 O51676 O574816 O574816 O60488 O604888 O6048811 O84812 P9024881			7846 7846 7884	5467 5064 3977 3702 3702 10376 1035	9340 5391 4384 4222 4222 7332 2524 11057 11057 11057 11057 14767 4767 4767 4767 4767 4767 4767
44.9 KD P 49.2 KD P BON RECEP LIASE. II. SE VACUOLE S PROTEIN WPLEX PRO HETASE 4 HETASE 4 HETASE 6 HETASE 6 HETASE 7 HETASE 7 HETASE 7 HETASE 8 HETASE 1 HET	REVERSE TRANSCRIPTASE REVERSE TRANSCRIPTASE REVERSE TRANSCRIPTASE REVERSE TRANSCRIPTASE RYDOTHETICAL 26.7 KD p  2 XOXJ. 2 XOXJ. 2 XOXJ. 2 XOXJ. 2 XOXJ. 3 2 XOXJ. 3 2 XOXJ. 3 3 4 3 3 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3	CC CHEMOKINE ST38 PREC 2 BETA CHEMOKINE EXODUS- ORF_F136.  HYPOTHETICAL 16.6 KD P 2 REVERSE TRANSCRIPTASE 2 REVERSE TRANSCRIPTASE 2 REVERSE TRANSCRIPTASE 2 REVERSE TRANSCRIPTASE 2	SORTILIN-RELATED RECEP 1. SORTILIN-RELATED RECEP 1. LR11. 1. LOW-DENSITY LIPOPROTEI 1. GP250 PRECURSOR. 1. LR11. 1. POLYPROTEIN. 1. RANTES PRECURSOR. 2.	IL-10-INDUCIBLE CHEMOK 1 NIRD.  NIRD.  CALPAIN LP82.  CALPAIN LP82.  CALPAIN ISOFORM LP85.  I CALPAIN ISOFORM LP85.  I CALPAIN SOFORM LP85.  COLPAIN MUSCLE TYPE CALPAIN P9 1 SKELETAL MUSCLE SPECIF CORKSCREW PROTEIN Y122 1 COSMID EZOD12.  INVERSIN.	HYPOTHETICAL 15.3 KD P 1 URF 7 PROTEIN (FRAGMEN 1 MAST CELL GROWTH FACTO 1 C-KIT LICAND TRUNCATED 1 MAST CELL GROWTH FACTO 1 181 (FRAGMENT). 151 181 (FRAGMENT). 17 181 (FRAGMENT) CO-T 1 MITOTIC CHECKPOINT CON 1 LATENT TRANSFORMING GR 1 EXTRACELLULAR REELIN ( REELIN. 1 REELIN. 1 1 HYPOTHETICAL 367.1 KD 1
2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02 2.98e+02		. 98e+02 . 98e+02 . 98e+02 . 98e+02 . 98e+02 . 98e+02		. 89e+02 . 89e+02 . 89e+02 . 89e+02 . 89e+02 . 89e+02 . 89e+02 . 89e+02 . 89e+02	

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000626;
01-JUL-1997
                                                                                                                                                                                                                                                 LT 2
054843 PRELIMINARY; PRT; 700 AA.
054843;
01-JUN-1998 (TREMBLREL. 06, CREATED)
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
CALPAIN 2 (80KDA M-CALPAIN SUBUNIT).
CAPNZ OR CALPSO.
TISSUE-NERVOUS SYSTEM;
GLASS J.D., NASH N.R.,
SUBMITTED (JUL-1997) TO
EMBL; AF015038; G273599
                                                                                                                                                          MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J., BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.; "Homo sapiens Chromosome 16 BAC clone CIT987SK-A-152E5."; SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.

CHANG M.S., MCNINCH J., ELIAS III C., MANTHEY C.L., (
MENG T., BOONE T., ANDREW D.P.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATARRHINI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MACROPHAGE-DERIVED CHEMOKINE PRECURSOR MDC OR A-152E5.1.
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01-NOV-1998
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                                                                                                                 SEQUENCE FROM N.A.
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., GRAY P.W.;
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llarity 100.0%;
Conservative
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AA;
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     G2735951;
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93
10580
                       TO EMBL/GENBANK/DDBJ
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Q67726
Q17901
Q23388
Q23388
O93128
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Pred. No.
0; Misma
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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MACROPHAGE-DERIVED CHEMOKINE
65EA63D2 CRC32;
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. 6.18e+00;
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NON-STRUCTURAL PROTE
C10C5.6 PROTEIN.
ZK1067.2.
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                          WESSELINGH
DATA BANKS.
                                                                                                                                                                                             MAMMALIA;
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Query Match
Best Local S
Matches
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Best Local :
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027064;
01-JAN-1998
01-JAN-1998
01-AUG-1998
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088430;
01-NOV-1998
01-NOV-1998
01-NOV-1998
                   SMITH D.R., DOUCETTE-STAMM L.A., DELOUGHERY C., LEE H.-M., DUBOIS J., ALDREDGE T., BASHIRZADEH R., BLAKELY D., COOK R., GILBERT K., HARRISON D., HOANG L., KEAGLE P., LUMM W., POTHIER B., QIU D., SPADAFORA R., VICARE R., WANG Y., WIERZBOWSKI J., GIBSON R., JIWANI N., CARUSO A., BUSH D., SAFER H., PATWELL D., PRABHAKAR S., MCDOUGALL S., SHIMER G., GOYAL A., PIETROVSKI S., CHURCH G.M., DANIELS C.J., MAO J.-I., RICE P., NOLLING J., REVET J.N.;
"Complete genome sequence of Methanobacterium thermoautotrophicum deltaH: functional analysis and comparative genomics.";
J. BACTERIOL. 179:7135-7155(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CC CHEMOKINE ABCD-1.
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MGD; MGI:88264; CAPN2.
SEQUENCE 700 AA; 79871
                                                                                                                                                                                                                                                              METHANOBACTERIUM THERMOAUTOTROPHICUM. ARCHAEA; EURYARCHAEOTA; METHANOBACTEF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 98353531.
SCHANIEL C., PARDALI E.,
SHIMIZU T., SEIDL T., AN
HYPOTHETICAL PROTEIN SEQUENCE 64 AA; 7
                                                                                                                                                                                          MEDLINE; 98037514.
                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN-DELTA H;
                                                                                                                                                                                                                                                  METHANOBACTERIUM.
                                                                                                                                                                                                                                                                                                           HYPOTHETICAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RODENTIA; SCIUROGNATHI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Activated murine B lymphocytes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    / Match 100.0%;
Local Similarity 100.0%;
nes 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      74 DICADP 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       chemokine which acts selectively EXP. MED. 188:451-463(1998).
3L; AF052505; G3378115
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NCE 92 AA; 10302
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similarity 83.3%;
5; Conservative
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8 (TREMBLREL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10302 MW;
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07,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ₩;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 43;
Pred. No.
1; Misma
                                                                                                                                                                                                                                                                                                                        CREATED)
LAST SEQUENCE UE
LAST ANNOTATION
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Pred. No. 6.18e+00;
0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                   PRT;
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on activated T of
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Best Local S
Matches
                                                                                                                   $EQUENCE FROM N.A.

SUM R., LIN S.-F., MILLER G.;
SUBMITTED (SEP-196) TO EMBL/GENBANK/DDBJ DA
EMBL; U75698; G1718266; -.
EMBL; U74585; G1658273; -.
EMBL; U93872; G2246546; -.
EMBL; U9386; G3551763; -.
EMBL; U71366; G3551763; -.
PFAM; PP00048; 118; 1
HYPOTHETICAL PROTEIN.

SEQUENCE 95 AA; 10485 MW; 5283348D CRC32
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Q98158 PRELIMINARY;
Q98158; O12569;
01-FEB-1997 (TREMBLREL. (
01-JUL-1997 (TREMBLREL. (
01-JUL-1998 (TREMBLREL. (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RUSSO J.J., BOHENZKY R.A., PARRY J.P., PERUZZI D., EDI SUBMITTED (MAY-1997) TO EM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            genes by
                                                                                                                                                                                                                                                                                                                                                   NEIPEL F., ALBRECHT J.C., FLECKENSTEIN B.;
"Cell-homologous genes in the Kaposi's sarcoma-associated rhadinovirus human herpesvirus 8: determinants of its pathogenicity?";
J. VIROL. 71:4187-4192(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RUSSO J.J.,
PARRY J.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NICHOLAS J., RUVOLO V.R., BURNS W.H., SANDFORD G., WAN HENDRICKSON S., GUO H.G., HAYWARD G.S., REITZ M.S.; SUBMITTED (NOV-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VIRUSES; DSDNA VIRUSES, NO RNA SI
GAMMAHERPESVIRINAE; RHADINOVIRUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KAPOSI'S SARCOMA-ASSOCIATED VIRUSES; DSDNA VIRUSES, NO F
                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. MEDLINE; 97296220.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. MEDLINE; 97094384.
74 QICADP
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274:1739-1744(1996).
                                       Similarity 5; Conser
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llarity 83.3%;
Conservative
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                                       Conservative
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                                                           93.2%;
83.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A., CHIEN M.C., CHEN J., YAN M., EDELMAN I.S., CHANG Y., MOORE P. EMBL/GENBANK/DDBJ DATA BANKS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytokine
                                   Score 41; DB 14;
Pred. No. 2.81e+01;
1; Mismatches 0
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LAST SEQUENCE UP
LAST ANNOTATION
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Pred. No. 1.71e+01;
1; Mismatches 0;
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                                                                                                                       CRC32;
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                                                                             Length
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                                     Indels
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Best Local Similarity
Matches 5; Conser
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081519;
081519;
01-NOV-1998 (TREMBLREL 0
01-NOV-1998 (TREMBLREL 0
01-NOV-1998 (TREMBLREL 0
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01-NOV-1998
                         SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                     077102;
                                                                                                                                                                   JIANG H.,
    SEQUENCE
                                                                    SIGNAL
                                                                                                                                                                                                                                              MANDUCA SEXTA (TOBACCO HAWKMOTH) (TOBACCO HORNWORM).
EUKARYOTA; METAZOA; ARTHROPODA; TRACHEATA; HEXAPODA; INSECTA
PTERYGOTA; LEPIDOPTERA; SPHINGIODEA; SPHINGIDAE; SPHINGINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
STRAIN-CV. COLDMBIA;
LATREILLE P., ELLIOTT G., LE T.;
"The sequence of A. thallana T24M8.";
SUBMITTED (JUL-1998) TO EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ARABIDOPSIS THALIANA (MOUSE-EAR CRESS),
EUKARYOTA; VIRIDIPLANYAE; CHAROPHYTA/PEHRYOPHYTA;
EUKARYOTA; VIRIDIPLANYAE; CHAROPHYTA/PEHRYAE, MAGNOLIOPHYTA;
TRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA, MAGNOLIOPHYTA;
EUDICOTYLEDONS; ROSIDAE; CAPPARALES; BRASSICACEAE; ARABIDOPSIS.
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T24M8.10.
                                                                                     EMBL;
                                                                                                                                                                                                           SEQUENCE
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STRAIN-CV. COLUMBIA;
                                                                                                                                             Pro-phenol oxidase activating
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AF077409; G3319366;
NCE 258 AA; 28721
                                                                                   AF059728;
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ED (JUL-1998) TO
                                                                                                  nol oxidase activating proteinase from an insect, bacteria-inducible protein similar to Drosophila LACAD. SCI. U.S.A. 95:12220-12225(1998).
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998 (TREMBLREL. 08, LA
998 (TREMBLREL. 08, LA
L OXIDASE ACTIVATING I
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V. COLUMBIA;
                                                                                                                                                                                  98445352.
                                                                                                                                                                WANG Y., KANOST M.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (JUL-1998)
    383 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COLUMBIA;
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                                                                               G3746547;
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EMBL/GENBANK/DDBJ DATA BANKS.
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LAST ANNOTATION UPDAT
PROPHENOL OXIDASE; B667688E CRC32;
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Mismatches 0;
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Best Local
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                                                                                                               032439;
01-JAN-1998;
01-JAN-1998;
01-NOV-1998;
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MEDLINE; 98133649.

"Host Cell killing and bacterial conjugation require overlapping "Host cell killing and bacterial conjugation require overlapping of genes within a 22-kb region of the Legionella pneumophila geno PROC. NATL. ACAD. SCI. U.S.A. 95:1669-1674(1998).

EMBL; AF026534; G2895283; -.

EMBL; Y15044; E1251898; -.

EMBL; Y15044; E1251995; -.

EMBL; Y15044; E1252195; -.
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01-JUN-1998
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ANDREWS H.L., VOGEL J.P., ISBERG R.R.;

"Identification of linked Legionella pneumophila genes essential intracellular growth and evasion of the endocytic pathway.";

INFECT. IMMUN. 66:950-958(1998).
STREPTOMYCES ALBOGRISEOLUS.
BACTERIA; FIRMICUTES; ACTINOBACTERIA;
STREPTOMYCETACEAE; STREPTOMYCES.
                                                                                                                                                                                                                                                                                          411 EICGDP 416
|||:||
1 EICADP 6
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VOGEL J.P., ANDREWS H.L., 1
"Conjugative transfer by ti
pneumophila.";
SCIENCE 279:873-876(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PURCELL M., SHUMAN H.A.; SUBMITTED (FEB-1998) TO
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BACTERIA; PROTEOBACTERIA;
                                                                     SAM-P20D
                                                                                          SERINE PROTEASE PRECURSOR.
                                                                                                                                                                                                       032439
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DOTO OR ICMB.
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(TREMBLREL.)
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(TREMBLREL. 08, LAST ANN
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larity 83.3%;
Conservative
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Pred. No. 2.81e+01
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ANNOTATION
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No. 2.81e+01;
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ce system of Legionella
                       STREPTOMYCETES
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Q54395 PRELIMINARY;
Q54395; Q53544;
Q1-00V-1996 (TREMBLREL 01
Q1-FEB-1997 (TREMBLREL 02
Q1-NOV-1998 (TREMBLEL 08
Q1-NOV-1998 (TREMBLEL 08
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045748;
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01-JUN-1998
01-JUN-1998
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HAWKINS T., HILLIER L., JIER M., JOHNSTON L., JONES M., KERSHAW
KIRSTEN J., LAISTER N., LATREILLE P., LIGHTNING J., LLOYD C.,
MCMURRAX A., MORFIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,
RIFKEN L., ROOPRA A., SAUNDERS D., SHOWNKEEN R., SMALDON N., SMI
SONNHAMMER E., STADEN R., SULSTON J., THIERRY-MIEG J., THOMAS K.
VAUUDIN M., VAUGHAN K., WATERSTON R., WATSON A., WEINSTOCK L.,
WILKINSON-SPROAT J., WOHLDMAN P.;
"2.2 M of contiguous nucleotide sequence from chromosome III of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAGUCHI S., OGAWA T., ENDO T., MOMOSE H.;
"A gene homologous to the Streptomyces chymotrypsin-like protease same-p20) gene is tandemly located.";
BIOSCI. BIOTECHNOL. BIOCHEM. 61:909-913(1997).
EMBL; D86743; D1022640; -.
PFAM; PF00089; trypsin; 1.
                                                                                                                                                                                                                                                                                                                                                                NATURE 368:32-38(1994).
EMBL; Z81115; E1247209; -.
SEQUENCE 314 AA; 36587
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MEDLINE; 94150718.
WILSON R., AINSCOUGH R.,
BURTON J., CONNELL M., CC
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MEDLINE; 97321869.
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283 AA;
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                   CREATED)
LAST SEQUENCE UPDATE)
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                                                                                                                                                                                                                                                                                                    Score 40; DB 5;
Pred. No. 4.59e+01
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Pred. No. 4.59e+01
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POTENTIAL.
1; 482039A6
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Best Local Similarity
Matches 5; Conser
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Best Local :
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PTRB.
MYCOBACTERIUM LEPRAE.
BACTERIA; FIRMICUTES;
MYCOBACTERIUM.
[1]
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BACTERIA; FIRMICUTES; AC
STREPTOMYCETACEAE; STREE
[1]
                                                      01-JUL-1997
01-JUL-1997
01-NOV-1998
                                                                                   LT 13
005748
005748;
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01-JAN-1998
01-NOV-1998
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TAGUCHI S., ENDO T., NAOI Y., MOMOSE H.;
"Molecular cloning and sequence analysis of a gene encoding extracellular serine protease from Streptomyces lividans 66.
BIOSCI. BIOTECHNOL. BIOCHEM. 59:1386-1388(1995).
                                                                                                                                                                                                                                             MCLEAN J., HARRIS D., BARRELL
SUBMITTED (SEP-1996) TO EMBL/
-!- SIMILARITY: TO PEPTIDASE
-OLIGOPEPTIDASE FAMILY.
                                                                                                                                                                                                                                                                                                                                           MTCY369.26.
                                                                                                                                 312 EICEDP :
||| ||
1 EICADP (
                                                                                                                                                                                                                                                                                                                      MYCOBACTERIUM TUBERCULOSIS BACTERIA; FIRMICUTES; ACTI
                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                    HYPOTHETICAL
                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                              MYCOBACTERIUM
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                    FIRMICUTES;
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354 AA;
                                                      (TREMBLREL.
(TREMBLREL.
                                                                                                                                                                                                          552 AA;
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(TREMBLREL.)
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157 POTENTI
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                   ACTINOBACTERIA;
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05, LAST SEQUENCE UP
08, LAST ANNOTATION
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LAST SEQUENCE ANNOTED
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Pred. No. 4.59e+01;
0; Mismatches 1
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Pred. No. 4.59e+01;
3; Mismatches 0
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/GENBANK/DDBJ DATA BANKS
FAMILY S9A; ALSO KNOWN ;
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ANNOTATION UPDATE)
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                   MYCOBACTERIA;
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RESULT 15

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AC Q14745;

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DT 01-NOV-1998 (TREMBLREL. 08, LAST)

DT 01-NOV-1998 (TREMBLREL. 08, LAST)

DE LD78 ALPHA BETA PRECUSSOR (FRAGS

OS HOMO SAPIENS (HUMAN).

OC EUKARYOTA; METAZOA; CHORDATA; VI

OC CATARRHINI; HOMINIDAE; HOMO.

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of Mycobacterium Leprae.";
MOL. MICROBIOL. 7:197-206(1993).
EMBL; 295151; E315055; -.
EMBL; 295152; ProlyLoligopep; 1
( PFAM; PF00326; ProlyLoligopep; 1
724 AA; 81361 MW; A8
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090733;
090733;
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01-NOV-1998
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BADCOCK K., CHURCHER
SUBMITTED (MAY-1997)
[2]
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ARCH. VIROL. 143:631-643(1998).
EMBL; D86634; D1029708; -.
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MEDLINE; 98301984.
NAMBA S., KASHIWAZAKI S.,
"Complete nucleotide seque
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O EMBL/GENBANK/DDBJ
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O EMBL/GENBANK/DDBJ DATA BANKS.
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                                                                          (FRAGMENT)
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Pred. No. -
2; Mismat
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Pred. No. 4.59e+01
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No. 4.59e+01
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01-JUL-1997 (TREMBLREL. 04
01-NOV-1998 (TREMBLREL. 08
BETA CHEMOKINE EXODUS-2.
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDJ
                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.;
SEQUENCE FROM N.A.;
STOTINK A.;
STOTINK A.;
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O08688;
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SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HEDRICK J.A., ZLOTNIK A.;
"Identification and characterization
containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
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NON_TER
                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                            NAGIRA M., IMAI T., HIESHIMA K., KUSUDA J., RII
NISHIMURA M., KAKIZAKI M., NOMIYAMA H., YOSHIE
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA
EMBL; U88320; G2196920; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A. MEDLINE; 97400322.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HROMAS R.A., GRAY P., KLEMSZ M., FIFE K., SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATARRHINI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; D63785; G961440; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PFAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBMITTED (AUG-1995) TO EMBL/GENBANK/DDBJ EMBL; D63785; G961440; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ISHIZUKA K., IGATA-YI R., NARUSE K., NAKASHIMA H., OHUCHI K.,
KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., IIO M., MIURA F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
TISSUE=BRAIN;
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                                                                                                                                                                      Local Similarity les 5; Conse
                                                                                                                                  73 ELCADP 78
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EICADP
                                                                                                                                                                                                                                                                    AF001979; G2624925; -. AB002409; D1022673; -. PF00048; il8; 1.
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HOMINIDAE; HOMO.
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                    PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GRAY P.,
                                                                                                                                                                      Conservative
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                                                                                                                                                                      Pred.
1; N
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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2; 1
                                                                                                                                                                                          Score 39;
Pred. No. 7
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Pred. No. 7.43e+01
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LD78 ALPHA BETA
                  PRT;
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DATA BANKS.
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                                                                                                                                                                                                            Length 134;
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Best Local Similarity
Matches 4; Conser
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Best Local Similarity
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01-JUL-1997 (TREMBLREL. 0
01-NOV-1998 (TREMBLREL. 0
CALPAIN 5 (CALPAIN-LIKE P
CAPN5 OR NCL-3.
                                                                                                                                                                                                                                                                                                                    Q20397
Q20397;
Q1-NOV-1996
Q1-NOV-1998
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056043;
01-JUN-1998
01-JUN-1998
01-JUN-1998
01-AUG-1998
                                                                                                                                                        CAENORHABDITIS ELEGANS.
EUKARYOTA; METAZOA; NEMATODA;
RHABDITINA; RHABDITOIDEA; RHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              UPADHYAYA N.M., LI Z., RAMM K., YANG M., GELLATLY J.;
GERLACH W.L., WATERHOUSE P.M.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
EMBL; AF020335; G2921098; -.
SEQUENCE 1192 AA; 133080 MW; 6BD970E3 CRC32;
    SUBMITTED
                                              SEQUENCE FROM N.A. COLES L.;
                                                                                                                                                                                                                                                                                      F44D12.10
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RICE RAGGED STUNT VIRUS.
VIRUSES; DSRNA VIRUSES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MGD; MGI:1100859; CAPNS.
PFAM; PF00168; C2; 1.
PFAM; PF00648; Cys_protease_2;
PFAM; PF01067; Calpain_III; 1.
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EMBL: Y10656; E300457; -.
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EUKARYOTA; ME
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    (DEC-1995)
                                                                                                                                                                                                                                                                                                                        (TREMBLREL.)
(TREMBLREL.)
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(TREMBLREL.)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
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ETAZOA; CHORDATA; VERTEBRATA;
· MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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    TO
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EMBL/GENBANK/DDBJ DATA BANKS
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                                                                                                                                                            DA; SECERNENTEA; RHABDITIA; RHABDITIDA; RHABDITIDA; PELODERINAE; CAENORHABDITI
                                                                                                                                                                                                                                                                                                                        CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Pred. No. 7.43e+01
2; Mismatches
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Pred. No. 7.43e+01;
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is lacking a
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                                                                                                                                                                                                                                                                                                                                 UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         μ.
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Best Local Similarity
                                                               ARCHAEOGLOBUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Molecular analysis of two new Steel mutations in mice transversion or an insertion.";
MAMM. GENOME 7:843-846(1996).
EMBL; X95379; E220404;
SEQUENCE 123 AA; 13892 MW; F3244130 CTATA
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Q61854; O1-NOV-1996 (TREMBLREL 01,
01-NOV-1996 (TREMBLREL 01,
01-NOV-1998 (TREMBLREL 08,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WILSON R., AINSCOUGH R., ANDERSON K., BAYNES C., BERKS M., BONFIELD BURTON J., CONNELL M., COPSEY T., COOPER J., COULSON A., CRAXTON M., DEAR S., DU Z., DURBIN R., FAVELLO A., FULTON L., GARDNER A., GREEN HAWKINS T., HILLIER L., JIER M., JOHNSTON L., JONES M., KERSHAW J., KIRSTEN J., LAISTER N., LATREILLE P., LIGHTNING J., LLOYD C., KIRSTEN J., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C., RIFKEN L., ROOPEA A., SAUNDERS D., SHOWNKEEN R., SMALDON N., SMITH SONNHAMMER E., STADEN R., SULSTON J., THIERRY-MIEG J., THOMAS K., VAUGHAN K., WATERSTON R., WATSON A., WEINSTOCK L., WILLINSON SPROAT J., WOHLDMAN P., "2.2 Mb of contiguous nucleotide sequence from chromosome III of C. REIGERS."
                                                                                                                                                                                                                                   01-JAN-1998 (TREMBLREL.
01-JAN-1998 (TREMBLREL.
01-AUG-1998 (TREMBLREL.
HYPOTHETICAL 15.3 KD PRO
                                                                                                                                                                                                                                                                                                                                                                                                             O29340
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SEQUENCE
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SEQUENCE FROM N.A. STRAIN-VC-16 / DSM
                                                                                                                            ARCHAEOGLOBUS FULGIDUS. ARCHAEA; EURYARCHAEOTA;
                                                                                                                                                                                                                                                                                                                                                                                 029340;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN=(102/ELXC3H /EL)F1; TISSUE-BRAIN; MEDLINE; 97032534.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SCIUROGNATHI; MURIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
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EMBL; Z68298; E214752;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EICADP 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity 83.3%, 5; Conservative
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94150718.
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                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
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4304 / ATCC 49558;
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Pred. No.
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                                                                                                                                   ARCHAEOGLOBACEAE;
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Q05391
PRELIMINARY;
Q05391;
Q1-NOV-1996 (TREMBLREL 01, CO1-NOV-1996 (TREMBLREL 01, IO1-NOV-1998 (TREMBLREL 08, IO1-NOV-1998 (TREMBLREL 
                                                                                                                                     ULT 23
064384; PRELIMINARY;
064384; (TREMBLREL 0
01-NOV-1996 (TREMBLREL 0
01-NOV-1996 (TREMBLREL 0
01-NOV-1998 (TREMBLREL 0
MAST CELL GROWTH FACTOR
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KLENK H.-P., CLAYTON R.A., TOMB J.-F., WHITE O., NELSON K.E., KETCHUM K.A., DODSON R.J., GWINN M., HICKEY E.K., PETERSON J.D., RICHARDSON D.L., KERLAVAGE A.R., GRAHAM D.E., KYRPIDES N.C., FLEISCHMANN R.D., QUACKENBUSH J., LEE N.H., SUTTON G.G., GILL S., KIRKNESS E.F., DOUGHERTY B.A., MCKENNEY K., ADAMS M.D., LOFTUS B. PETERSON S., REICH C.I., MCNEIL L.K., BADGER J.H., GLODEK A., ZHO OVERBEEK R., GOCAYNE J.D., WEIDMAN J.F., MCDONALD L., UTTERBACK T. COTTON M.D., SPRIGGS T., ARTIACH P., KAINE B.P., SYKES S.M., SADOW P.W., D'ANDREA K.P., BOWMAN C., FUJII C., GARLAND S.A., MASON T.M., OLSEN G.J., FRASER C.M., SMITH H.O., WOESE C.R.,
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INIT_MET
NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                in the thermophilic cyanobacterium Synechococcus BIOCHEM. J. 294:239-251(1993). EMBL; X70433; G49237; -.
                                            (C-KIT LIGAND C-TERMINALLY MGF OR SL OR KL. MUS MUSCULUS (MOUSE). EUKARYOTA; METAZOA; CHORDAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WEDLINE; YOSIASON, LUTTER R., WALKER J.E.;
VAN WALRAVEN H.S., LUTTER R., WALKER J.E.;
"Organization and sequences of genes for the subunits
"Organization and sequences of genes for the subunits
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               URF 7 PROTEIN (FRAGMENT)
SYNECHOCOCCUS SP. (STRAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "The complete genome sequence sulphate-reducing archaeon Arc NATURE 390:364-370(1997).
                        SCIUROGNATHI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-6716;
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BACTERIA; CYANOBACTERIA; CHROOCOCCALES; SYNECHOCOCCUS.
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SEQUENCE 138 AA; 15252 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                        150 EFCADP 155
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Local Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                           σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  200 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                        MURIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 200
; 22219 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (STRAIN PCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          86.4%;
                                                 CHORDATA;
                        MURINAE;
                                                                                                                                                             01,
01,
                                                                                                                   TRUNCATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nce of the hyperthermophilic,
Archaeoglobus fulgidus.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE
                                                                                                                                                             CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 38; DB 2; 1
Pred. No. 1.19e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 38; DB 1; 1
Pred. No. 1.19e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                            VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AA0F314C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             51E6A718 CRC32;
                        SOW
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                 SECRETED FORM KL-SLD)
                                                                                                                                                                                                                                                              208 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                              MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                              EUTHERIA; RODENTIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
∵£
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATP synthase
                                                                                                                   (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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RESULT 25
ID P97332;
AC P97332;
DT 01-MAY-1997 (TREMBLREL. 03, CREATED)
DT 01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UP)
DT 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION I
DE MAST CELL GROWTH FACTOR.
GN MGF S1-3NEU.
OS MUS MUSCULUS (MOUSE).
OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAI
COC SCIUROGNATHI; MURIDAE; MURINAE; MUS.
RN [1]
RP SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IDENTIFY OF THE SULT OF THE SU
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          064222;
064222;
01-NOV-1996
01-NOV-1996
01-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE; 92330001.
HUANG E.J., NOCKA K.H., BUCK J., BESMER
HUANG E.J., NOCKA K.H., BUCK J., BESMER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-NOV-1996 (TREMBLREL. 01, CREATED)
01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
C-KIT LIGAND TRUNCATED TRANSMEMBRANE FORM KL-2 (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FLANAGAN J.G., CHAN D.C., LEDER P.;
FLANAGAN J.G., CHAN D.C., LEDER P.;
FLANAGAN J.G., CHAN D.C., LEDER P.;
Franking from of the kit ligand
Transmembrane form 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Differential expression and proceed the kit-ligand: KL-1 and KL-2. MOL. BIOL. CELL 3:349-362(1992).
EMBL: S40534; E59502;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   [2]
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MEDLINE; 92330001
HUANG E.J., NOCKA K.H., BUCK J., BESMER
"Differential expression and processing
of the kit-ligand: KL-1 and KL-2.";
MOL. BIOL. CELL 3:349-362(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SCIUROGNATHI; MURIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MGD; MGI:96974; MGF.
NON_TER 208 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TRANSMEMBRANE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
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4; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           245
245 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           208 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              32
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           86.4%;
llarity 66.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           245
27541 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 38; DI
Pred. No. 1.1
2; Mismatch
                                                                                                                                                                                                                    CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 38; DB 11;
Pred. No. 1.19e+02;
2; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOW
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ij
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n the Sld mutant.";
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1.19e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              o e
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of two cell associated
                                                                                                                                                                                                                                                                                                                                                              Ä
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                                                                                                 MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    two
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 245;
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                                                                                                 EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EUTHERIA; RODENTIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               determined
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RESULT 27

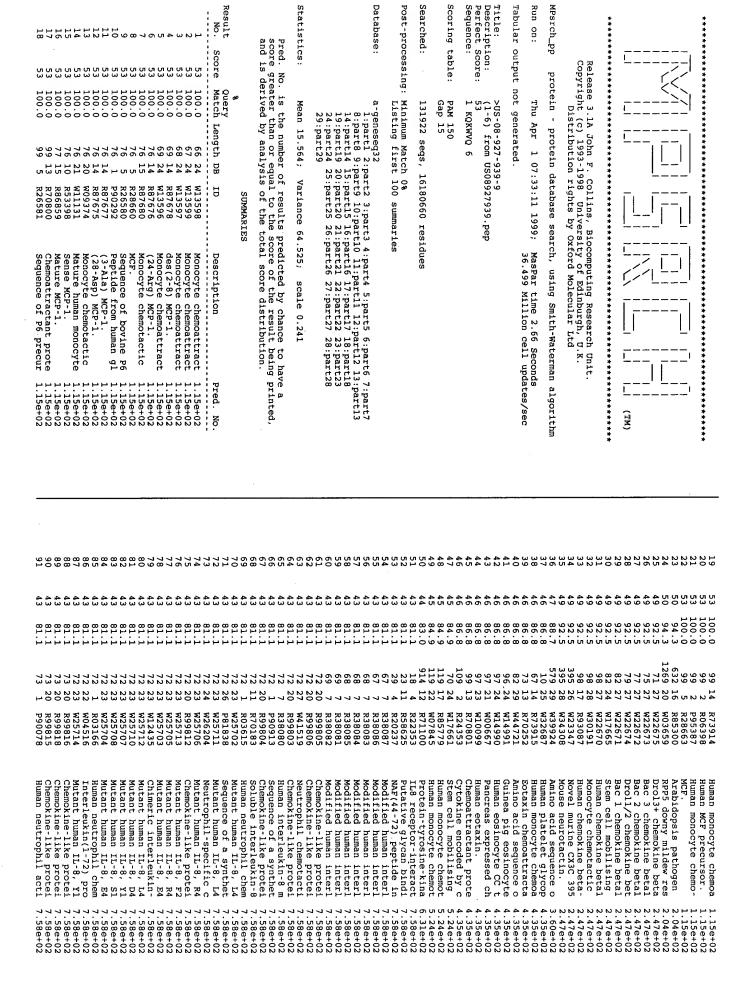
ID P71057; O08176;
AC P71057; O08176;
DT 01-FEB-1997 (TREMBLREL. 02, CRE
DT 01-FEB-1997 (TREMBLREL. 08, LAS
DT 01-NOV-1998 (TREMBLREL. 08, LAS
DT 01-NOV-1998 (TREMBLREL. 08, LAS
DE HYPOTHETICAL 39.8 KD PROTEIN.
GN YVER.
OS BACILLUS SUBTILIS.
OC BACILLUS.
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN-168TRP;
RA FABRET C., QUENTIN Y., CHAPAL N
RL SUBMITTED (AUG-1996) TO EMBL/GE
RN [2]
RP SEQUENCE FROM N.A.
RA DEBLIZOT F.C.;
RL SUBMITTED (APR-1997) TO EMBL/GE
RN [3]
RP SEQUENCE FROM N.A.
STRAIN-168;
RX MEDLINE; 98044033.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULTATION OF THE STATE OF THE
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Best Local S
Matches
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Best Local (
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Q62524; PRELIMINARY;
Q62524; (TREMBLREL. (
01-NOV-1996 (TREMBLREL. (
01-NOV-1998 (TREMBLREL. (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GRAW J., LOESTER J., NEUHAEUSER-KLAUS A., PRETS
"Molecular analysis of two new Steel mutations
transversion or an insertion.";
MAMM. GENOME 7:843-846(1996).
EMBL; X99322; E254164; -.
VARIANT 193 193 P.-L.
VARIANT 207 207 SEQUENCE 273 AA; 30645 MW; 4A2BE512 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN-102/E1XC3H/E1F1;
GRAW J., NEUHAEUSER-KLUUS, PRETSCH;
MUTAT. RES. GENOMICS 382:75-78(1997).
EMBL; Y10287; E1172508; -.
MGD; MGI:96974; MGF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 97032534.
GRAW J., LOESTER J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MUS MUSCULUS (MOUSE).
EURARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MGF.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-C3H/E1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27
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ilarity 66.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 86.48;
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                                                                                                                                                                                                                                                                                                                                                         BACILLUS/CLOSTRIDIUM GROUP; BACILLACEAE;
                                                                                                                                                                                                       CHAPAL N., GUISEPPI
D EMBL/GENBANK/DDBJ I
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01,
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02, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
                                                                                                        EMBL/GENBANK/DDBJ
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Pred. No.
2; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 38; DB 11; L
Pred. No. 1.19e+02;
2; Mismatches 0;
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LAST ANNOTATION UPDATE)
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1.19e+02;
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                                                                                                                                                                                                       I A.,
                                                                                                        DATA BANKS
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BANKS.
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RA BORRISS R., BOURSIER L., BRANS A., BRAUN M., BRIGNELL S.C., BRON S.,
RA BORRISS R., BOURSIER L., BRANS A., BRAUN M., BRIGNELL S.C., BRON S.,
RA BORRISS R., BRUSSIER L., BRANS A., BRAUN M., BRIGNELL S.C., BRON S.,
RA BORLIET S., BRUSSIER L., BRAUN M., BRIGNELL S.C., BRON S.,
RA BOUILLET S., BRUSSIER L., CALWELL B., CAPUANO V., CARTER N.M.,
RA CHOI S.K., CODANI J.J., CONNERTON I.F., CUMMINGS N.J., DANIEL R.A.,
RA CHOI S.K., CODANI J.J., CONNERTON I.F., CHALLER S.D., EMMERSON P.T.,
RA CHIZOT F., DEVINE K.M., DUSTERHOFT A., EHRLICH S.D., EMMERSON P.T.,
RA CHIZOT F., DEVINE K.M., DUSTERHOFT A., BALLERON N., GHIM S.Y.,
RA CHIZOT F., DEVINE K.M., DUSTERHOFT A., HILLERN N., GHIM S.Y.,
RA CHIZOT M., FUJITA Y., FUMA S., GALLIZI A., GALLERON N., GHIM S.Y.,
RA CHIZOT M., FUJITA Y., FUMA S., GALLIZI A., GALLERON N., GHIM S.Y.,
RA CHIZOT S., HOSONO S., HULLO M.F., ITAYA M., JONES L., JORIS B.,
RA HOLSAPPEL S., HOSONO S., HULLO M.F., ITAYA M., JONES L., JORIS B.,
RA HOLSAPPEL S., KARAHARA Y., KLABRER-BLANDHARD M., KURITA K., LAPIDUS A.,
RA KOESTTER P., KONINGSTEIN G., KROGH S., KUMANO M., KURITA K., LAPIDUS A.,
RA MASUDA S., MAUEL C., MEDIGUE C., MEDINA N., MELLADO R.P., MIZUNO M.,
RA MASUDA S., MAUEL C., MEDIGUE C., MEDINA N., MELLADO R.P., MIZUNO M.,
RA MASUDA S., MAUEL C., MEDIGUE C., MEDINA N., MELLADO R.P., MIZUNO M.,
RA MOESTL D., NAKAI S., NOBACK M., NOONE D., O'REILLY M., OGAWA K.,
RA POPORT G., REY M., REYNOLDS S., RIEGER M., RIVOLTA C., ROCHA E.,
RA ROCHE B., ROSE M., SADAIE Y., SATO T., SCANLAN E., SCHLEICH S.,
RA RAPOPORT G., SEY M., REYNOLDS S., RIEGER M., RIVOLTA C., ROCHA E.,
RA TAKAHASHI H., TAKEMARU K., TAKEUCHI M., TAMAKOSHI A., TANAKA T.,
RA YASUNGTO K., YATA K., YOSHTOA K., YAMAHOTO R., YATA K., YOSHTOA K., YAMAHOTO R., YATA K., YATA K., YOSHTOA K., YANAHOTO H., YAMANO H., YATA K., YATA K., YATA K., YOSHTOA K., YANAHOTO H., YAMANO H., YATA K., YATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
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                                                                                                                                                                                                                                                                           01-NOV-1996
01-NOV-1996
                                                                                                                                                                                                                                                                                                                                Q21805
Q21805;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUBMITTED
                                                                                                                                                                                                  EUKARYOTA; METAZOA; NEMATODA; SECERNENTEA; RHABDITIA; RHABDITIDA; RHABDITINA; RHABDITOIDEA; RHABDITIDAE; PELODERINAE; CAENORHABDITIS
                                                                                                                                                                                                                                        CAENORHABDITIS ELEGANS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KUNST F., OGASAWARA N., YOSHIKAWA H., DANCHIN A.; SUBMITTED (NOV-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN=168;
KUNST F., O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "The complete genome sequence of the gram-positive bacterium Bacillus subtilis.";
                                                                                             SEQUENCE FROM
                                                                                                                                                 HARRIS
                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                        MEDLINE;
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YOSHIKAWA H., DANCHIN A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              288 ICADP 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Match 86.4%;
Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                          2 ICADP 6
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                                                                      94150718.
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                                                                                                                             (JUL-1996)
                                                                                                                                                                                                                                                                           (TREMBLREL.
(TREMBLREL.
 HILLIER
                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
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                                                                                                                             EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                           01,
01,
JIER M.,
                                                                                                                                                                                                                                                                           CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
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Pred. No. 1.19e+02;
                                                                                                                                                                                                                                                                                                                                                   PRT;
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JOHNSTON L., JONES M., KERSHAW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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                                                                                                                                                                                                                                                                           UPDATE)
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AC OCCUPATION OCCUPANT OCCUPAN
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Matches
Query Match
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Best Local (
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01-NOV-1998
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O80378;
                                                                                                                                                                                                                                                                                                                                042135 PRELIMINARY; PRT
042135; CREAT
01-JAN-1998 (TREMBLREL. 05, CREAT
01-JAN-1998 (TREMBLREL. 05, LAST
01-NOV-1998 (TREMBLREL. 08, LAST
NA+/MYO-INOSITIOL CO-TRANSPORTER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "A novel protein from carrot embryo.";
SUBMITTED (MAR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS
EMBL; AB012703; D1033788; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DAUCUS CAROTA (CARROT).

EUKARYOTA; VIRIDIPLANTAE; CHAROPHYTA/EMBRYOPHYTA GROUP; EMB
TRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA;
EUDICOTYLEDONS; ASTERIDAE; ARALIALES; APIACEAE; DAUCUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KIRSTEN J., LAISTER N., LATREILLE P., LIGHTNING J., LLOYD C., MCMUURRAY A., MORTIMORE B., O'CALLAGIAM M., PARSONS J., PERCY C., RIFKEN L., ROOPRA A., SAUDDERS D., SHOWNEEN R., SMALDON N., SMITH SONNIAMMER E., STADEN R., SULSTON J., THIERRY-MIEG J., THOMAS K., VAUDIN M., VAUGHAN K., WATERSTON R., WATSON A., WEINSTOCK L., WILKINSON_SPROAT J., WOHLDMAN P.;
                                                                     SUBMITTED (OCT-1997) TO ENEMBL; AB008225; D1023825; PFAM; PF00474; SSF; 1.
SEQUENCE 673 AA; 74135
                                                                                                                                                                                                                                                                                 XENOPUS LAEVIS (AFRICAN CLAWED FROG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; AMPHIBIA; BATRACHIA; ANURA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NATURE 368:32-38(1994).
EMBL; Z75955; E253186; -
PFAM; PF00105; Zf-C4; 1.
SEQUENCE 369 AA; 4164
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                                                                                                                                                                                     TISSUE-SMALL INTESTINE;
                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                MESOBATRACHIA; PIPOIDEA; PIPIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Match 86.4%;
Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44 EICGNP 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
tes 4; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 433 AA;
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(TREMBLREL.)
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74135 MW;
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2; N
  Score 38; DB 13;
Pred. No. 1.19e+02;
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Pred. No.
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                                                                        A8030618 CRC32;
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                        Length 673;
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Search completed: Thu Apr Job time : 33 secs.	Matches 4; Con. Db 347 EICGNP 352
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                                                                                                                                                                                                                                                                                             Query Match 100.0%;
Best Local Similarity 100.0%;
Matches 6; Conservative
Homo sapiens.
CA2152141-A.
20-DEC-1996.
19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
(LEWI/) LEWIS I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93
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                                                                                              Monocyte chemoattractant protein analogue MCP-1 (11-76). Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                   W13599 standard; peptide; 67 AA. W13599; 07-NOV-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W13598 standard; peptide; 66
W13598;
07-NOV-1997 (first entry)
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20-DEC-1996.
19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
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Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
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                                                                                                                                                                                                                                         46 kqkwvq 51
|||||
1 KQKWVQ 6
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                                                                                  disease.
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P90017
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Pred.
0; M
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                                                                                                                                                                                                                                                                                            B 53; DB 24; Le
. No. 1.15e+02;
Mismatches 0;
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Human neutrophil chem
Myceliophthora thermo
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PS Disclosure: Page 5; 27pp; English.

CC The present sequence represents an analogue, MCP-1 (11-76), of monocyte Cc chemoattractant protein-1 (MCP-1). The analogue, which lacks the CC N-terminal amino acids 1-10 of MCP-1, acts as an antagonist of MCP-1 (CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 CC receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration CC inflammation sites. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung CC diseases. The analogue competes more effectively with MCP-1 for binding CC MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared
                                                                                                                        Pri anti-inflammatory agent
Pri anti-inflammatory agent
Claim 7; Page 5; 77pp; English.
CC The present sequence represents an analogue, MCP-1 (9-76), of monocyte
CC Chemoattractant protein-1 (MCP-1). The analogue, which lacks the
CC N-terminal amino acids 1-8 of MCP-1, acts as an antagonist of MCP-1
CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1
CC compartor. The analogue is useful as an anti-inflammatory agent to block
CC the effects of MCP-1 which is an inflammatory mediator causing migration
CC of monocytes and other cells e.g. basophils and lymphocytes into
CC inflammation sites. MCP-1 has been implicated in allergic and chronic
CC inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
CC MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably
CC with 75:1 for prior art mutant 7ND.
Sequence 68 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
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Homo sapiens.
CA2152141-A.
20-DEC-1996.
19-JUN-1995; CF
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W13597 standard; peptide; 68
W13597;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) - lacks MCP-1 activity and inhibits receptor binding, useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (LEWI/) LEWIS I.
Gong J, Lewis I;
WPI; 97-165844/16.
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Local Similarity 100.0%;
hes 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 KQKWVQ 6
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97-165844/16
h 100.0%;
Similarity 100.0%;
6; Conservative
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CA-152141.
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and inhibits receptor binding, useful
Score 53; DB 24; L
Pred. No. 1.15e+02;
0; Mismatches 0;
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                                                                 Length 68
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Claim 4: Page 11: 22pp; English.

Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of anino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                          Homo sapiens.
CA2152141-A.
20-DEC-1996.
19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
                                                                                                                                                                                                         (LEWI/) LEWIS I.
Gong J. Lewis I;
WPI; 97-165844/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W13596 standard; peptide; 69
W13596;
07-NOV-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Monocyte chemoattractant protein analogue MCP-1 (8-76). Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
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107-NOV-1994; US-182301.

12-NOV-1993; US-182301.

(DAND ) DANA FARBER CANCER INST INC.
The present sequence represents an analogue, MCP-1 (8-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the N-terminal amino acids 1-7 of MCP-1, acts as an antagonist of MCP-1
                                                                                       anti-inflammatory agent
Claim 5; Page 5; 27pp; English.
                                                                                                                                          N-terminally truncated monocyte chemo:attractant protein-1 lacks MCP-1 activity and inhibits receptor binding, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                          lung disease.
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WPI; 95-215051/28.
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Best Local Similarity 100.0%;
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Best Local Similarity 100.0%;
Matches 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28 Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18 MAY-1995.
07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(2AND ) DANA FARBER CANCER INST INC.
ROllins B, Zhang YJ;
WPI; 95-215051/28.
                                                           R87680 standard; protein; R87680; O5-MAR-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammator sites. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared with 75:1 for prior art mutant 7ND.
Monocyte chemotactic activating factor for use as wound remedy monocyte chemotactic activating factor; MCAF; wound remedy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - a capable of inhibiting the monocyte chemo-attractant activity endogenous MCP-1 and can be used to treat restenosis Claim 5; Page 11; 22pp; English.
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R87676 standard; protein;
R87676;
21-FEB-1996 (first entry)
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69 AA;
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1.15e+02;
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1.15e+02;
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Matsushima K, Naruto M;

WPI; 95-131181/17.

Wound treatment using monocyte chemotactic factor - has potent therapeutic effect on skin wounds and ulcers

Disclosure; Page 12: 22pp; Japanese.

The invention relates to a new remedy for curing wounds which, instead of comprising a growth factor, comprises a monocyte chemotactic activating factor (MCAF) or its variants or derivatives. The factor has potent effect on skin wounds and ulcers. The present sequence is human MCAF, the activity of which is exemplified as the new remedy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 48 + Page 36; 56pp; English.
An expression plasmid, pHM483, for producing MCF(76) consisting of 76 amino acids was constructed. The prod. can be used for e treating bacterial infectious diseases.

Sequence 76 AA;
                                                                                                                                                                                     Sequence of bovine P6 protein. Monocyte chemoattractant; bovi
                                                                                                                                                                                                                                                                          R26580;
28-JAN-1993
                                                                                                                                                                                                                                                                                                                                               R26580 standard;
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Prodn. of polypeptide(s) having monocyte chemotactic activity using expression plasmids with E. coli elements and specific E.coli strains
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Fukui T, Matsuo N, Yamada M, Yamagishi J;
WPI; 92-398864/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
W09219737-A.
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09-MAY-1991; JP-135950.
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13-SEP-1994; J01512.
13-SEP-1993; JP-227385.
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WO9507710-A1.
                                                                                                                                                 inflammation therapy.
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Pred. No. 1.15e+02;
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Pred. No. 1.15e+02;
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                                                                                                                                                                                         P6-derivative;
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                                                                                                                                                                                     thrombosis;
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Best Local Similarity 100.0%;
Matches 6; Conservative
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20-JUL-1989; 030423.
31-JAN-1989; US-304234.
31-JAN-1989; US-304234.
(USSH) US Dept. of Health and Hu
YOShimura T; Robinson E; Appella
WPI, 89-263501/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  neoplasms.

Disclosure; page 3; 46pp; English.

Pisclosure; page 3; 46pp; English.

Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from Peptide is derived from glioma cell line under glio
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Claim 1, Page 3; 6pp; German.
Poly(A+)RNA from bull seminal vesicles was used to prepare a cDNA i the expression vector lambda gtll. 1.5 x 10(5) cDNA clones were screened with a polyclonal anti-p6 antiserum of monospecific immunoglobulin G and six positives were identified. The insert of suitable cDNA clone, pH42, was cloned into pUC18 and sequenced. pH42 encodes the 11.114 Da precursor of p6. It is called Monocyte Chemoattractant (bMCP-1), which is a homologue of human (h)MCP-1. There is 72% overall AA sequence homology to hMCP-1 with the signal peptide showing 100% and the central region showing 89% homology.
                                                                                                                                                                                                                                               LT 11
R87671; standard; protein; 76
R87677;
21-FEB-1996 (first entry)
(3-Ala) MCP-1.
                                                                                                                                                   monocyte chemoattractant protein; angioplasty.
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Peptide from human glioma cell line U-105MG.
Glioma; leucocyte; chemotaxis; neoplasms.
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(SCHA-) SCHAPER & BRUE
Gramm W, Lins E;
WPI; 92-293438/36.
                                                        Key
                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New peptide with specific chemotactic activity for monocytes - iso from glioma or leucocyte cells, useful for treating infections and
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modified_site
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Similarity 100.0%;
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          Location/Qualifiers
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               PT Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are probable of inhibiting the monocyte chemo-attractant activity of predictions and can be used to treat restenosis claim 3; Page 11; 22pp; English.

CC Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous CC MCP-1, provided that the derivative has not been modified by the csubstitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg CC are: (1) substitution of 3-Asp by Ala; and/or (4) deletion of anino CC derivative based on the parent protein disclosed in Rollins, Molecular and CC and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

CC The peptides can be used to prevent restenosis, e.g. in patients con Sequence 76 Ab.
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Claim 6; Page 11; 22pp; English.

Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations substitution of 28-Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients
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disulfide_bond 12..52
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07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC.
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22-OCT-1992; 965678.
22-OCT-1992; US-965678.
27-MAY-1994; US-250958.
(UNMI) UNIV MICHIGAN.
Kunkel SL, Lyle LR, St.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Anti-sense Monocyte Chemotactic Protein-1 oligo:nucleotide(s) - useful for therapy or diagnosis of restenosis, etc. Disclosure; Column 13-14; 16pp; English.

Phis is the amino acid sequence of the human monocyte chemoattractant protein (MCP)-1, a member of the C-C chemokine family. MCP-1 is a poten stimulator of monocyte chemotaxis and is produced by injured vascular smooth cells thus attracting monocytes and macrophages which infiltrate the injured area and release growth factor. This causes proliferation of the vascular smooth cells resulting in restenosis. The gene sequence can be used to generate antisense sequences e.g. T4803-7, which can be used to inhibit in vitro MCP-1 prodn. by mononuclear cells e.g. lymphocytes of macrophages, or smooth muscle cells, esp. in order to prevent vascular macrophages.
   US5605671-A.
25-FEB-1997.
                                                                                                                                                                                                                                              Mature human monocyte chemoattractant protein-1 (MCP-1). MCP-1; mature chemoattractant protein-1; cytokine; interleukin-8; IL-8; neutrophil activating peptide; labelling; inaging; targetin radionuclide; infection; inflammation; neoplasm; atheromatous les
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WPI; 96-505405/50.
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Human; monocyte chemoattractant protein; antisense; inhibition; mononuclear cell; lymphocyte; macrophage; smooth muscle cell;
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                                                                                                                                     Propride(s) - is used for inhibiting, treating or imaging areas of peptide(s) - is used for inhibiting, treating or imaging areas of rescular restenosis or potential restenosis

Propride(s) - is used for inhibiting, treating or imaging areas of the secular restenosis or potential restenosis

Propride(s) - 42pp; English.

The sequences given in R53398-99 represent sense and antisense monocyte chemotactic protein-1 (MCP-1) respectively. These oligonucleotides may be labelled with a radionuclide and use therapeutically for the treatment of vascular restenosis.

Radiolabelled antisense MCP-1 compounds may be constructed using high cenergy alpha or beta emitting isotopes rather than the gamma cenitters cutomarily used for diagnostic purposes. Antisense MCP-1 compounds inactivate MCP-1 or inhibit production of MCP-1 so that monocytes are not attracted to the area of vascular injury and C proliferation of vascular cells is inhibited.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            radio:labelling neutrophil-activating peptide(s) - for imaging readio:labelling neutrophil-activating peptide(s) - for imaging radioactive agent by the second of the seco
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R53398;
15-DEC-1994 (first_entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lyle LR;
WPI; 94-151314/18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-APR-1994.
20-OCT-1993; U10074.
22-OCT-1992; US-965678.
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WPI; 97-153541/14.
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(UNMI ) UNIV MICHIGAN.
Kunkel SL, Lyle LR, Strieter RM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-OCT-1992; 956862.
05-OCT-1992; US-956863.
05-OCT-1992; US-956862.
29-APR-1994; US-235659.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sense MCP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MLCW ) MALLINCKRODT MEDICAL INC
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nes 6; Conservation
56 kgkwvg
                                                                        / Match 100.0%;
Local Similarity 100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 KQKWVQ
                                                6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RNA; DNA; monocyte chemotactic de; vascular restenosis; alpha; monocytes; vascular injury.
                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A,
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                                                                     Score
Pred.
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Pred. No. 1.15e+02;
0; Mismatches 0
                                              0;
                                              Mismatches
                                                                  53; DB 10;
No. 1.15e+02;
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beta; emitting isotope;
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This sequence represents the mature form of monocyte chemotactic protein-1 (MCP-1). MCP-1 is a member of the "C-C" family of chemoattractant cytokines or chemokines. It is a potent stimulator of monocyte chemotaxis and has an extemely high degree of specificity for this cell type. MCP-1 is produced by injured vascular smooth muscle cells and attracts the monocytes and macrophages which infiltrate the area, releasing growth factors and resulting in proliferation of vascular smooth muscle and restenosis. Nucleic acid molecules which are antisense to the MCP-1 mRNA may be used to inhibit translation of MCP-1 and so may be useful for inhibiting vascular restenosis, partic, following balloon angioplasty or a related process. The molecule may be radiolabelled to increase its therapeutic effect or for imaging areas of potential
                                                                                                                                                                                                                                                                                                                                                                                                                                  Chemoattractant protein MCP-1.
MCP-1; chemoattractant; heparanase; heparin; heparan sulfate; arthritis; restenosis; cancer; wound healing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense; monocyte chemotactic protein-1; MCP-1; "C-C" family; chemoattractant cytokine; chemokine; monocyte; chemotaxis; vascular smooth muscle cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LT 16
R86859
                           Screening for cpds. with anti-heparanase activity - by inhibition of heparin or heparan sulphate degradation, potentially useful for treating arthritis, restenosis, Claim 13; Page 49; 60pp; English.
                                                                                                                                              (UPJO ) UPJOHN CO.
Hoogwerf AJ, Ledbetter
WPI; 95-082239/11.
N-PSDB; Q85370.
                                                                                                                                                                                                                                                              26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R70800 standard; Protein; R70800;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New anti:sense oligo:nucleotide(s) and peptide(s) for inhibiting restenosis - are directed against C-C family cytokine(s) such a monocyte chemotactic protein, opt. radio:labelled for therapy or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-JAN-1995; U00605.
14-JAN-1994; US-182917.
(MLCW ) MALLINCKRODT MEDICAL
Lyle LR, Thomas-Miller B;
WPI: 95-263703/34.
                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
WO9504158-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N-PSDB; T03528.
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W09519167-Al.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            restenosis
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||||||
| KQKWVQ 6
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Local Similarity 100.0%;
hes 6; Conservative
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Pred. No. 1.15e+02;
0; Mismatches 0;
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under reducing conditions and
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06-APR-1995.
28-SEP-1994;
28-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 4; 6pp; German.

Poly(A+)RNA from bull seminal vesicles was used to prepare a cDNA in the expression vector lambda gtll. 1.5 x 10(5) cDNA clones were screened with a polyclonal anti-P6 antiserum of monospecific immunoglobulin G and six positives were identified. The insert of a suitable cDNA clone, pH42, was cloned into pUC18 and sequenced.

PH42 encodes the 11,114 Da precursor of P6. It is called Monocyte Chemoattractant (bMCP-1), which is a homologue of human (h)MCP-1.

There is 72% overall AA sequence homology to hMCP-1 with the signal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     activated with transglutaminase, are given in R70786-804. Most are prepared by reverse transcription of mRNA from activated human leukocytes, then cloning of the cDNA into pVL1392 baculovirus vector, and expression in Sf9 cells in the presence of reduced glutathione and dithiothreitol.
                                                                                          Human monocyte chemoattractant factor hMCP-1.
Human monocyte chemoattractant factor; hMCP-1; chemokine; vaccine; meningitis related homologous antigenic sequence; MRHAS; RV-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (SCHA-) SCHAPER & BRUEMMER GMBH & Gramm W, Lins E;
                                          Homo sapiens.
WO9509232-A.
                                                                                                                                         R73914;
05-DEC-1995
                                                                                                                                                                  R73914 standard; protein; 99
                                                                                                                                                                                                                                                                                                                                       peptide showing 100% and the central region showing 89% homology Sequence 99 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Drug containing a bovine protein homologous to human MCP-1 - for treating inflammation, tumours, thrombosis, and immune reactions also for diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-JUL-1991;
31-JUL-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    peptide
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Monocyte chemoattractant; bovine P6-derivative; thrombosis; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-JAN-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inflammation therapy.
                                                                                immunoassay;
                                                                                                                                                                                                                                          79 kqkwvq 84
                                                                                                                                                                                                                                                                                 Match 100.0%;
Local Similarity 100.0%;
les 6; Conservative
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Similarity 100.0%;
6; Conservative
                                                                                                                                        (first entry)
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DE-125251.
                                                                                 diagnosis;
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                                                                                 treatment;
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Pred. No.
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                                                                                prophylactic; bacterial;
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. 1.15e+02;
.~hes 0;
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. 1.15e+02;
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                                                                   R P-PSDB, R06398.

R P-PSDB, R06398.

T Human monocyte chemotactic factor type polypeptide and DNA encoding it - useful as antibacterial and antitumour agents.

Claim 2; Page 25; 27pp; English.

C The sequence was deduced from the DNA sequence determined from three recombinant plasmids, pHMCF7, pHMCF25 and pHMCF29 which were isolated from a cDNA library prepd. from RNA extracted from human promyelocytic leukaemia cell line, HL-60 (ATCC CCL-240).

C vectors. In plasmids pHMCF7 and pHMCF29 bases 105 and 226 were T and G resp; in pHMCF75 they were C and A resp. The AA at posn.

C fo of the precursor protein is therefore not determined and may be either Ala or Thr. The protein may be produced by recombinant DNA techniques in E.coli, and is useful as a drug for treatment of certain bacterial infectons and cancers.
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Best Local s
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      detecting and preventing meningitis

Claim 47; Fig 8/10; 98pp; English.

R73914 is the chemokine Human monocyte chemoattractant factor hMCP-1.

It contains the meningitis related antigenic sequences (MRHAS) claimed in R73895 and R73907, which are recognised by a monoclonal antibody from the hybridoma Rubella virus (RV)-1. The claimed MRHAS peptides may be used in immunoassays to diagnose the presence of bacterial and/or viral meningitis agents in a sample, or in prophylactic and therapeutic meningitis treatments. The peptides may also be used as vaccines against meningitis.

NB: Identified by matching corresponding MRHAS peptides.

Sequence 99 AA;
                                                                                                                                                                                                                                                                                                                                                  02-JAN-1990; U00004.
01-JAN-1989; JP-000065.
03-FEB-1989; JP-026438.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SHAR/) SHARMA L R.
(VALS/) VAN ALSTYNE D.
Sharma LR, Van Alstyne D;
WPI; 95-147431/19
New peptide(s) and corresp. antibodies f
meningitis - the peptide(s) corresp. to
sites on bacterial and viral agents and
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R06398 standard; protein; 99
R06398;
                                                           DNA techniques in certain bacterial Sequence 99 AA;
                                                                                                                                                                                                                                                                                          Oppenheim J;
WPI; 90-253802/33.
                                                                                                                                                                                                                                                                                                                       Furutani Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human MCF precursor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-DEC-1990 (first entry)
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              Local Similarity
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Similarity 100.0%;
6; Conservative
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llarity 100.0%;
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/note-"Claim 1"
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Score
Pred.
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Pred. No. 1.15e+02;
0; Mismatches 0;
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RESULTANT RESULT
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Best Local :
                                                                                                                                                                                                                                                                                                        12-NOV-1992, J00550.
27-APR-1992, J00550.
09-MAY-1991, JP-135950.
(DAIN ) DAINIPPON PHARM CO LTD.
Fukui T, Matsuo N, Yamada M, Yamawa MPI, 92-398864/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human derived monocyte chemo-attractant peptide prods. - obtd. from human glioma cell line U-105MG or peripheral blood mononuclear leukocytes. Disclosure; fig 2; 66pp; English.

This is a human-derived monoyte chemo-attractant peptide (MCP-1) sequence MCP-1 exhibits optimal chemotactic activity at a concn. of lnM and has a mol. mass of c.a. 8,400 D. MCP-1 can be used for treating infection eg inflammatory disease, or for the control of neoplasms by accumulation of monocytes at the site of the infection. The corresp. DNA is obtd. by chemical synthesis, by screening reverse trascripts of mRNA from purified blood leukocytes or cell cultures of eg U-373 MG or KMG-5.
of 76 amino acids was constructed. DNA e prepd. using a recombinant plasmid pHMCF7. Sequence 99 AA;
                                                                                                                                                                                                       Prodn. of polypeptide(s) having monocyte chemotactic activity using expression plasmids with E. coli elements and specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US7330446-A.
25-JUL-1989; .
30-MAR-1989; 330446.
30-MAR-1989; "-330446.
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P95387 standard; protein; '
P95387;
P95387;
25-JUL-1989 (first entry)
                                                                                                   Disclosure; Page 43-44; 56pp; F
An expression plasmid, pHMC076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RBS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Plasmid; monocyte chemotactic factor;
termination; terminator; initiation;
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R28663 standard;
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                                                                                                                                                                          E.coli strains
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1 KQKWVQ
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Local Similarity 100.0%;
Nes 6; Conservative
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binson EA, Appella E,
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/product=MCP-1
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                                                                                                                                     English.
                                                              for producing MCF(76) 
ted. DNA encoding MCI
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1.15e+02;
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Best Local Similarity
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10-OCT-1996;
09-APR-1996;
07-APR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        may lead to acquired resistance to a broad range of pathogens.

Disclosure; Page 89-90; 131pp; English.

R85300 is the arabidopsis pathogen resistance gene RPP5 protein. In a new method the RPP5 gene is expressed highly in genetic constructs which may be used to impart a broad range of pathogen resistance, by induction of varilegation, to transgenic plants (or parts or propagules of plants) containing such constructs. RPP5 imparts resistance to the disease caused by the leaf mould fungal pathogen Cladosporium fulvum.

C.fulvum contains avirulence (Avr) genes that confer recognition by plants containing Cf-genes, leading to the activation of host defence mechanisms to attack the disease.

N.B. The amino acid sequence given here and that given as SEQ ID 10 in the specification are different, see features table and T06308.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N.B. The amino acid
the specification ar
Sequence 632 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RPP5 downy mildew resistance protein.
Arabidopsis; RPP5; disease-resistance; downy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W03659;
19-FEB-1997 (first entry)
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N-PSDB; T06308.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-MAY-1994; GB-009394
23-DEC-1994; WO-G02812
31-MAR-1995; GB-006658
07-APR-1995; GB-007232
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Pathogen resisitant; RPP5; tomato; C.fulvum; Avr 4; Avr 9; fungal;
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14-APR-1996
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R85300 standard; Protein; 632
                                                                                                                  WO9631608-A1
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                                                                                                                                                                                                                                                                                                                                peptide
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11-MAY-1995; G01075
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Similarity 100.0%;
6; Conservative
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llarity 83.3%;
Conservative
   G00849.
GB-007232.
                                                                                                                                                                                                                     /note= "Peptide W03660 (claim primer T37477 (claim 23)" 437..441
                                                                                                                                                 primer T37478
                                                                                                                                                 /note= "Peptide W06331 (claim 22),
primer T37478 (claim 23)"
                                                                                                                                                                                                                                                                                                                                            104..109
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Pred. No. 1.15e+02;
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Pred. No. 2.04e+02;
1; M1smatches 0;
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                                                                       Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Drol3+ variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 can be used to reduce excessive levels of Ck beta10 Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to creen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and boulet for inflammator, lung inflammation and atherosclerosis. Ck beta10 CDNA can be used to the compound of the control of the component of the control of th
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Best Local :
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W22675 standard; Protein; 71
W22675;
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Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (Peronospora parasitica). The sequence includes leucine-rich repeat regions, characteristic of many pathogen-resistance genes. The sequence shows strong homology to pathogen-resistance proteins (from tobacco, conferring tobacco-mosaic virus resistance) and L6 (from flax, conferring rust resistance), including regions involved in nucleotide binding (kinase-1a (P-loop), kinase-2 and kinase-3a domains). Primers T37477-78, corresponding to a conserved region between peptides W0366-61, may be used to identify other resistance genes in plants. The RPP5 gene may be expressed in a transgenic plant to confer disease-resistance.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         pro13+ chemokine beta10 or monocyte chemotactic protein 4 variant. Human; chemokine beta10; Ck beta10; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Isolated Arabidopsis pathogen resistance gene RPP5 - for prodn. transgenic plants esp. resistant to downy mildew fungus Claim 1; Fig 2; 59pp; English.
This sequence represents an Arabidopsis RPP5 protein, which confers disease-resistance against the downy mildew fungus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-FEB-1996; U02598.
23-FEB-1996; WO-U02598.
33-FEB-1996; WO-U02598.
Adams M, Alderson R, Applebaum E, Li H, Li Y, Lima SH, Parmelee D, White J;
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WO9731098-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Polypeptide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infection,
                            be used to isolate genes encoding similar and for chromosome identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         asthma and fibrosis
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Pred. No. 2.04e+02;
1; Mismatches 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Problembride encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infection, asthma and fibrosis

Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Bac 3 variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10 antagonist can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates compounds for (antigonist activity. The antagonist can be used to compounds for (antigonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and be used to isolate genes encoding similar peptides, in gene therapy content of the procession of the compound of the compound of the content of the conte
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Best Local S
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Best Local Similarity
                          M22672 standard; Protein; 77 AA.

W22672;
19-MAR-1998 (first entry)
Bac 2 chemokine beta10; or monocyte chemotactic protein 4 variant.
Human; chemokine beta10; Ck beta10; treatment; antagonist;
solid tumour; infection; autoimmune disease; asthma; antibody;
fibrotic disease; psoriasis; neurodegenerative disease;
wound healing; haematopoiesis regulation; gene therapy;
chromosome identification; monocyte chemotactic protein 4;
leukaemia; MCP-4; Bac 2 variant.
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Bac 3 chemokine beta10 or
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W22673 standard; Protein; 75 AA
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Adams M, Alderson R, Applebaum E, Li H, Li Y, Lima
Parmelee D, White J;
WPI; 97-435153/40.
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WO9731098-A1.
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19-MAR-1998
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23-FEB-1996; WO-U02598.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                55 kekwvq
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Pred. No. 2.47e+02;
1; Mismatches (
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The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Bac 2 variant, which can bused to treat patients deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10 beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic opportunistic infections, autoimmune diseases. It also
                                                asthma and fibrosis
Example 11; Fig 5; 83pp; English.

Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or moncyte chemotactic protein 4 (MCP-4) Drol1/2 variant, which can moncyte chemotactic protein to (KP-4) Drol1/2, wariant, which can be used to treat deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10. Ck beta10 can be used to treat leukaemia, solid tumours, chronic or beta10 can be used to treat leukaemia, solid tumours, chronic or infartions, autoimmune diseases, asthma, fibrotic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck beta10 cDNA can be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Droll/2 chemokine betall or monocyte chemotactic protein 4 variant. Human; chemokine betall; Ck betall; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopolesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4; leukaemia; MCP-4; Droll/2 variant.
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Adams M, Alderson R, Applebaum E, Li
Parmelee D, White J;
WPI: 97-435153/40.
                  promotes wound
                                                                                                                                                                                                                Polypeptide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infect
                                                                                                                                                                                                                                                         (HUMA-) HUMAN GENOME SCI INC.
Adams M. Alderson R. Applebaum
Parmelee D. White J;
WPI; 97-435153/40.
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23-FEB-1996; U02598.
23-FEB-1996; WO-U02598
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                  psoriasis and neurodegenerative diseases. It also vound healing, regulates haematopoiesis and generative diseases.
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belled Ck beta10
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Pred. No. 2.47e+02; 
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autoimmune disease, infection,
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                                                                                                     Example 11; Fig 5; 83pp; English.

Example 11; Fig 5; 83pp; English.

Characteristics betail (Ck betail) or monocyte chemotactic protein 4 (MCP-4) Bac 1 variant, which can be used to treat patients deficient in Ck betail, while a Ck betail antagonist can be used to reduce excessive levels of Ck betail can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck betail can be used to identify its cognate receptor, while cells expressing the receptor can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck betail CDNA can be used to isolate genes encoding similar peptides, in gene therapy
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                                     Query Match
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Bac 1 chemokine beta10 or monocyte chemotactic protein 4 variant.

Human; chemokine beta10; Ck beta10; treatment; antagonist;

solid tumour; infection; autoimmune disease; asthma; antibody;

fibrotic disease; psoriasis; neurodegenerative disease;

wound healing; haematopoiesis regulation; generator therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck beta10 cDNA can be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
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W22671 standard; Protein;
W22671;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Adams M, Alderson R, Applebaum Parmelee D, White J; WPI; 97-435153/40.
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23-FEB-1996; U02598.
23-FEB-1996; WO-U02598
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
WO9731098-A1.
                                                                           Sequence
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                      Local Similarity
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Score 49; DB 27;
Pred. No. 2.47e+02;
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                                                                                                                                                                                                                                          PT Ten new chemokine(s) able to mobilise stem cells - used where PT increase resistance to infection
PT increase resistance to infection
PT claim 7; Page 11-12; 24pp; English.
CC of mobilishing stem cells. The chemokine can be used therapeutically to CC improve stem cell mobilisation, optionally together with a colony
CC stimulating factor or other haematoregulatory agent. It can be used therapeutically to increase the immune response to chronic infection (particularly concernation of parasitic), to promote wound healing, in (transplant)
CC bacterial or parasitic), to promote wound healing, in (transplant)
CC immunosuppressive treatment or disease, and to provide more rapid concernation of bone marrow after treatment for neoplastic or viral concernation of bone marrow after treatment for neoplastic or viral concernation of bone marrow after they have been genetically manipulated to deliver a selected gene product (gene therapy). The cells may be Sequence 82 AA;
                                                                                                                                                       Query Match 92.5%;
Best Local Similarity 83.3%;
Matches 5; Conservative
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Stem cell mobilising chemokine CKbeta-10.

Haematopoietic cell; parasitic infection; colony stimulating factor; haematoregulator; immune response; bacterial infection; transplant; wound healing; bone marrow; immunosuppression; regeneration; neoplastic disease; viral disease; gene therapy; cytotoxic drug.
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23-OCT-1996; U16959.
24-OCT-1995; US-006051.
(SMIK ) SMITHKLINE BEECHAM CORP.
Kreider BL, Li H, Pelus L, Wh.
MPI; 97-258956/23.
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W09715594-A1.
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16-DEC-1997
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##cross-references EMBL:X79416; NID
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monocyte chemoattractant protein 1 precursor - human

GDCF-1; glioma-derived monocyte chemotactic factor 1; MCAF;

MCP-1; monocyte chemotactic factor 1; monocyte secretory

protein; tumor-derived chemotactic factor

glioma-derived chemotactic factor 2 (GDCF-2)

#formal_name Homo sapiens #common_name man

20-Feb-1993 #sequence_revision 20-Feb-1993 #text_change
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                                                          Structure of human monocyte chemotactic protein regulation by {\tt TPA}.
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Scheit, K.H.
Blochem. Blophys. Res. Commun. (1994) 199:962-968
Porcine luteal cells express monocyte chemoattractant protein-1 (MCP-1): Analysis by polymerase chain reavers
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#formal_name Sus scrofa domestica #common_name domestic
30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change
08-Sep-1997
                                 A35474
                                                                                          Shyy, Y.J.; Li, Y.S.; Kolattukudy, P. Biochem. Biophys. Res. Commun. (1990)
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#product monocyte chemoattractant protein-1 #status
predicted #label MAT\
#binding_site carbohydrate (Asn) (covalent) #status
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Pred. No. 1.25e+01
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##cross-references GB:M37719; NID:g187447; PID:g487124
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'X',25-99 ##label ROB
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                                                                                                                                                                                                                                                                                                                                                                                                                                   #authors Furutani, Y.; Nomura, H.; Notake, M.; Oyamada, Y.; Fukui, Yamada, M.; Larsen, C.G.; Oppenheim, J.J.; Matsushima, F #journal Biochem. Biophys. Res Commun. (1989) 159:249-255 Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF).
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#cross-references MUID:89153605
#accession S03339
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#journal Adv. Exp. Med. Biol. (1991) 305:47-56
#title Human monocyte chemoattractant protein-1 (MCP-1).
#cross-references MUID:92095166
#accession I51841
                                                                                                   #cross-references MUID:89184525
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##cross-references GB:M24545; NID:g187434; PID:g307163
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#*cross-references GB:X14768; NID:g34513; PID:g34514
##crperimental_source glioma cell line U-105MG
##experimental_source glioma cell line U-105MG
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Griffin, P.R.; Shabanowitz, J.; Hunt, D.F.; App
Proc. Natl. Acad. Sci. U.S.A. (1989) 86:1850-1854
Complete amino acid sequence of a human monocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-1/monocyte chemotactic activating factor (MCP-1/MCAF).
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The human homolog of the JE gene encodes a mc
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FEBS Lett. (1989) 244:487-493
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                                                                                                                                                          of cellular immune
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#map_position 17q11.2-17q12
CLASSIFICATION #superfamily macrophage inflamm
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #journal Biochem. Biophys. Res. Commun. (1990) 167:904-909
#title identification of the monocyte chemotactic protein from
osteosarcoma cells and monocytes: detection of a novel
N-terminally processed form.
#cross-references_MUID:90211336
                                                           #accession
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24-28,'Q',30-99 ##label YEQ
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1-99 ##label LIY
##cross-references GB:S69738; NID:g545464; PID:g545465
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                                                                                           Wempe, F.; Kuhlmann, J.K.; Scheit, K.H.
Biochem. Biophys. Res. Commun. (1994) 202:1272-1279
Characterization of the bovine monocyte chemoattractant
                                                                                                                                                               JC2336
JC2336
                                                                                                                                                                                                                    monocyte chemoattractant protein-1 - bovine #formal_name Bos primigenius indicus #common_name zebu cattle 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
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                                                                            protein-1 gene.
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             protein
1-99 ##label WEM
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mature form) #status experimental\
#binding_site carbohydrate (Asn) (covalent) #status
predicted
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#product monocyte chemoattractant protein 1 #status
experimental #label MAT\
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#cross-references_MUID:92096117
                    #cross-references
#accession I46
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#+residues 1-99 ##label WEM
##cross-references GB:M84602; GB:M85264; NID:g163394; PID:g163395
   ##status
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##residues 50-68,'X',70-74,'X',76 ##label WE2
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                                                 Yoshimura, T.; Yuhki, N.
J. Immunol. (1991) 146:3483-3488
Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and expression in spleen cells.
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monocyte chemoattractant protein-1 - rabbit
#formal_name Oryctolagus cuniculus #common_name domestic
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#length 99 #molecular-weight 11114 #checksum
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#binding_site carbohydrate (Asn) (covalent) #status
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Pred. No. 1.25e+01
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#authors

Bevan, M.; Bancroft, I.; Bent, E.; Love, K.; Goodman, H.;

Dean, C.; Bergkamp, R.; Dirkse, W.; Van Staveren, M.;

Stiekema, W.; Drost, L.; Ridley, P.; Hudson, S.A.; Patel,

K.; Murphy, G.; Piffanelli, P.; Wedler, H.; Wedler, E.;

Wanmbutt, R.; Weitzenegger, T.; Pohl, T.M.; Terryn, N.;

Gielen, J.; Villarroel, R.; De Clerck, R.; Van Montagu, M.;

Lecharny, A.; Auborg, S.; Gy, I.; Kreis, M.; Lao, N.;

Kavanagh, T.; Hempel, S.; Kotter, P.; Entian, K.D.; Rleger,

M.; Schaeffer, M.; Funk, B.; Mueller-Auer, S.; Silvey, M.;

James, R.; Montfort, A.; Pons, A.; Pugdomenech, P.; Douka,

A.; Voukelatou, E.; Millori, D.; Hatzopoulos, P.;

Piravandi, E.; Obermaier, B.; Hilbert, H.; Duesterhoft, A.;

Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.;

Rechman, S.; Ansorge, W.; Cooke, R.; Berger, C.; Delseny,

M.; Voet, M.; Volckaert, G.; Mewes, H.W.; Klosterman, S.;

*#journal Nature (1998) 391:485-488

Nature (1998) 391:485-488

*#cross-references MUID:98121113

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##cross references GB:M57440; NID:g165469; PID:g165470
##cross references GB:M57440; NID:g165469; PID:g165470
#superfamily mecrophage inflammatory protein
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Local Similarity 83.3%;
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Suzuki,
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#formal_name Arabidopsis thaliana
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19-May-1994 *sequence_revision 19-May-1994 *text_change
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Pred. No. 3.58e+01;
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                    K.; Hirota,
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                    Y.; Mizuno,
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Best Local Similarity 83.3%;
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#title
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#title Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and expression in spleen cells.
#cross-references MUID:91225489
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##cross-references GB:M57439; NID:g165552; PID:g165553
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Local Similarity 83.3%;
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Cloning of a canine gene homologous
interleukin-8-encoding gene.
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#formal_name Oryctolagus cuniculus #common
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#length 95 #molecular-weight 106;
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I46997 #type complete
interleukin-8 - sheep
#formal_name Ovis sp. #common_name sheep
21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change
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A novel neutrophil chemoattractant generated during an anovel neutrophil chemoattractant
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nvolved in the host defense function.
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Pred. No. 5.05e+01;
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##cross-references EMBL:X78306; NID:g463253; PID:g463254
FICATION #superfamily beta-thromboglobulin
##status
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Local Similarity 83.3%;
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#length 101
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I46997
                          Lin, G.; Pearson, A.E.; Scamurra, R.W.; Zhou, Y.; Baarsch, M.J.; Weiss, D.J.; Murtaugh, M.P.
J. Biol. Chem. (1994) 269:77-85
Regulation of interleukin-8 expression in porcine alveolar macrophages by bacterial lipopolysaccharide.
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#common_name domestic sheep
06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
                                                                                                                                                      A53096 #type complete
interleukin-8 precursor - pig
#formal_name Sus scrofa domestica #common_name domestic pig
02-Jun-1995 #sequence_revision 02-Jun-1995 #text_change
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1; Mismatches
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Pred. No. 5.05e+01
1; Mismatches
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Pred. No. 5.05e+01;
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ACCESSIONS
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#authors
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##residues 1-103 ##label LIN
##cesidues 1-103 ##label LIN
##cross-references GB:M86923; NID:g164520; PID:g164521
CLASSIFICATION #superfamily beta-thromboglobulin
SUMMARY #length 103 #molecular-weight 11633 #checksum
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Best Local S
Matches
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#title Molecular cloning of porcine alveolar macrophage-derived neutrophil chemotactic factors I and II; identification #cross-references MUID:93041741
#accession A44253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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                                                        ##rostdues 1-324 ##label DIX
##cross-references GB:L06633; NID:g431327; PID:g431328
##note the authors translated the codon AGA for residue 304
Lys, GTT for residue 305 as Gln, and GCT for residue
                                                                                                            ##molecule_type mRNA
##residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ##status preliminary
##mollecule_type mRNA; protein
##residues 1-103 ##label GOO
##experimental_source alveolar macrophage
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Local Similarity 83.3%;
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Local Similarity 83.3%;
es 5; Conservation
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                                                                                                                                                                        Dixon, B.; Sahely, B.; Liu, L.; Pohajdak, B. Biochim. Biophys. Acta (1993) 1216:321-324 Cloning a cDNA from human NK/T cells which codes unusual leucine zipper containing protein.
                                                                                                                                                                                                                                                                                  #superfamily beta-thromboglobulin
#length 103 #molecular-weight 11677
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interleukin-8 homolog - pig
finterleukin-8 scrofa domestica #common_name domestic
30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change
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                                           Lys, GTT ro
 92.5%;
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                             #molecular-weight 36318
 Score 49;
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Pred. No. 5.05e+01;
1; Mismatches 0;
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Pred. No. 5.05e+01;
1; Mismatches (
 DB 2;
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Length 324
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Nakamura, Y.; Miyajima, N.; Hirosawa, M.; Sugiura, M.; Sasamoto, S.; Kimura, T.; Hosouchi, T.; Matsuno, A.; Muraki, A.; Nakazaki, N.; Naruo, K.; Okumura, S.; Shimpo, S.; Takeuchi, C.; Wada, T.; Watanabe, A.; Yamada, M.; Yasuda, M.; Tabata, S.

#journal DNA Res. (1996) 3:109-136

#title Sequence analysis of the genome of the unicellular cyanobacterium Synechocystis sp. PCC6803. II. Sequence determination of the entire genome and assignment of potential protein-coding regions.

#cross-references MUID:97061201

#accession $76877
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REFERENCE
#authors
                                                                                                                                                                                                                                                                                                                                         ORGANISM
DATE
                                                               ##cross-references GB:U17108; NID:g897562; PID:g897563
CLASSIFICATION #superfamily C4b-binding protein alpha chain;
factor H repeat homology
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ENTRY
TITLE
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#variety
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                                                           KEYWORDS
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Best Local Similarity 66.7%;
Matches 4; Conservative
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#title
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##cross-references EMBL:D90917; GJ
PID:g1653879
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                                                                                                                                                                                    Bookbinder, L.H.; Cheng, A.; Bleil, J.D.
Science (1995) 269:86-89
Tissue- and species-specific expression of sp56, a mouse
sperm fertilization protein.
A56740
                                                                                                                                                                                                                                                                                                                                sperm-egg recognition protein precursor - mouse
#formal_name Mus musculus #common_name house mouse
08-Jul-1995 #sequence_revision 03-Aug-1995 #text_change
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#length 145 #molecular-weight 16561 #checksum
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                                                     fertilization; homomultimer; peripheral membrane
                                                                                                                                                                                                                                                                                                                                                                                               A56740
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the nucleotide sequence was submitted to the EMBL Data Library, June 1996
#domain signal sequence #status predicted #label SIG\
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1; Mismatches 0;
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Pred. No. 9.89e+01;
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#genetic_code SGC3
#start_codon GTG
CLASSIFICATION #SUDER
SUMMARY
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158-218
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                                                       #journal
#title
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#title Complete sequence analysis of the genor
#cross-references_MUID:97105885
                                                                                                                                       #authors
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##note the nucleotide sequence was submitted to the
Library, November 1996
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Similarity 66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   h 88.7%;
Similarity 83.3%;
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#formal_name Rattus norvegicus
21-Feb-1995 #sequence_revision
08-Sep-1997
                                                                                                                                                                                                                                                                                         JC2478
eotaxin -
                                                                                                                                                             JC2478
JC2478
                      Jose, P.J.; Adcock, I.M.; Griffiths-Johnson, D.A.; Berkman N.; Wells, T.N.C.; Williams, T.J.; Power, C.A. Biochem. Biophys. Res. Commun. (1994) 205:788-794 Eotaxin: Cloning of an eosinophil chemoattractant cytokine and increased mRNA expression in allergen-challenged
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#length 651 #molecular-weight 72747 #check
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Pred. No. 9.89e+01;
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05-Apr-1995 #text_change
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Best Local Similarity 83.3%;
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#title Constitutive and allergen-induced expression
in the guinea pig lung.
#cross-references MUID:95173589
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FICATION #superfamily macrophage inflammatory protein
YY #length 96 #molecular-weight 10753 #checksu
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##cross-references EMBL:X77603; NID:g602551; PID:g602552
This protein is identified as a potent eosinophil chemoattractant.
FICATION #superfamily macrophage inflammatory protein
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##experimental_source corpus luteum
protein #superfamily macrophage inflammatory protein
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                                                                                                           Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke
Scheit, K.H.
Biochem. Biophys. Res. Commun. (1994) 205:148-153
Porcine luteal cells express monocyte chemoattractant
protein-2 (MCP-2): Analysis by cDNA cloning and nor
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eotaxin precursor - guinea pig
#formal_name Cavia porcellus #common_name guinea
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_
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#formal_name Sus scrofa domestica #common_name domestic pig
24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change
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#product eotaxin #status predicted #label MAT\
#binding_site carbohydrate (Thr) (covalent) #status
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J. Immunol. (1993) 151:6225-6236
#title cDNA cloning and expression of guinea pig neutrophil
attractant protein-1 (NAP-1): NAP-1 is highly conserved in
guinea pig.
#cross-references.MUID:94065176
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#title
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##cross-references GB:X72309
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Local Similarity 100.0%;
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The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome 17q11.2-q12.
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Neutrophil attractant protein-1 - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
23-Feb-1997
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monocyte chemotactic protein 3 precursor -
monocyte chemotactactant protein MCP-3
#formal_name Homo sapiens #common_name man
28-Oct-1994 #sequence_revision 28-Oct-1994
Human monocyte chemotactic protein-3 (MCP-3): Molecular cloning of the cDNA and comparison with other chemokines
                Biochem. Biophys. Res. Commun. (1993) 191:535-542
Human monocyte chemotactic protein-3 (MCP-3): Molecular
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#length 101 #molecular-weight 11.
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                                                                       Opdenakker, G.; Froyen, G.; Fiten, P.; Proost,
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#product monocyte chemoattractant protein-2 #status
predicted #label MAT
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Pred. No. 1.38e+02;
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#map_position 17q11-17q12
#introns 36/1; 75/2
$SIFICATION #----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   39
                                                                                                                                                                                                                                                                                     #journal J. Immunol. (1993) 150:5025-5032
#title cDNA cloning of guinea pig monocyte and expression of the recombinant #cross-references MUID:93267104
#accession I48147
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##molecule_type mRNA
##resiance
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##cross-references EMBL:X71087; NID:g288396; PID:g288397
This protein induces proteinase secretion and chemomacrophages and monocytes.
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##cross-references GB:L04985;
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Local Similarity 100.0%;
nes 5; Conservative
                                 78 QKWVQ 82
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   148147 #type complete
monocyte chemoattractant protein-1 - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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                                                                                                                                          #superfamily macrophage inflammatory protein #length 120 #molecular-weight 13741 #checksum
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cytokine; glycoprotein; inflammation
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#product monocyte chemotactic protein 3 #status
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Pred. No. 1.38e+02;
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Pred. No. 1
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NID:g349820; PID:g349821
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                                                                                        DB 2; L
1.38e+02;
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                                                                                                                                                                     ##residues 1-289 ##label AQF
##cross-references GB:AE000755; NID:g2984063; PID:g2984068; GB:AE000657
##experimental_source strain VF5
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1-187 ##label COL
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##cross-references GB:AE001226; GB:AE0000520; NID:g3322785; PID:g3322795
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Sutton, G.G.; Dodson, R.; Gwinn, M.; Hickey, E.K.; Clayton,
R.; Ketchum, K.A.; Sodergren, E.; Hardham, J.M.; McLeod,
M.P.; Salzberg, S.; Peterson, J.; Khalak, H.; Richardson,
D.; Howell, J.K.; Chidambaram, M.; Utterback, T.; McDonald,
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L.; Weidman, J.; Smith, H.O.; Venter, J.C.
Science (1998) 281:375-388
Complete genome sequence of Treponema pallidum, the syphilis
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Lenox, A.L.; Graham, D.E.; Overbeek, R.; Snead, M.A.;
Keller, M.; Aujay, M.; Hurrer, R.; Feldman, R.A.; Short,
J.M.; Olson, G.J.; Swanson, R.V.
Nature (1998) 392:353-358
The complete genome of the hyperthermophilic bacterium
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C71317
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hypothetical protein TP0503 - syphilis spirochete
#formal_name Treponema pallidum subsp. pallidum #common_name
syphilis spirochete
24-Jul-1998 #sequence_revision 24-Jul-1998 #text_change
                                                                                      aminoacy1-tRNA synthetase; protein biosynthesis
#length 289 #molecular-weight 33535 #checksum
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#formal_name Aquifex aeolicus
08-May-1998 #sequence_revision 08-May-1998 #text_change
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#length 187
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#title
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#accession E64019
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##experimental_source strain OT3
##note this accession replaces an interim accession for a
                         ##residues
                                                                            ##status
     ##cross-references
                                              ##molecule_type DNA
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                                                                                                                                       Fleischmann, R.D.; Adams, M.D.; White, O.; Clayton, R.A.;
Kirkness, E.F.; Kerlavage, A.R.; Bult, C.J.; Tomb, J.F.;
Dougherty, B.A.; Merrick, J.M.; McKenney, K.; Sutton, G.;
FitzHugh, W.; Fields, C.; Gocayne, J.D.; Scott, J.;
Shirley, R.; Liu, L.I.; Glodek, A.; Kelley, J.M.; Weidman,
J.F.; Phillips, C.A.; Spriggs, T.; Hedblom, E.; Cotton,
M.D.; Utterback, T.R.; Hanna, M.C.; Nguyen, D.T.; Saudek,
D.M.; Brandon, R.C.; Fine, L.D.; Fritchman, J.L.; Fibrmann,
J.L.; Geoghagen, N.S.M.; Gnehm, C.L.; McDonald, L.A.;
Small, K.V.; Fraser, C.M.; Smith, H.O.; Venter, J.C.
Science (1995) 269:496-512
Whole-genome random sequencing and assembly of Haemophilus
influenzae Rd.
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Hino, Y.; Yamamoto, S.; Sekine, M.; Baba, S.; Kosugi, H.;
Hosoyama, A.; Nagai, Y.; Sakai, M.; Ogura, K.; Otsuka, R.;
Nakazawa, H.; Takamiya, M.; Ohfuku, Y.; Funahashi, T.;
Tanaka, T.; Kudoh, Y.; Yamazaki, J.; Kushida, N.; Oguchi,
A.; Aoki, K.; Yoshizawa, T.; Nakamura, Y.; Robb, F.T.;
Horikoshi, K.; Masuchi, Y.; Shizuya, H.; Kikuchi, H.
DNA Res. (1998) 5:55-76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #formal_name Haemophilus influenzae
18-Aug-1995 #sequence_revision 18-Aug-1995 #text_change
10-Oct-1997
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#formal_name Pyrococcus horikoshii
14-Aug-1998 #sequence_revision 14-Aug-1998 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E64019 #type complete
hypothetical protein HI1054 - Haemophilus influenzae (strain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #length 334 #molecular-weight 36602 #checksum 4643
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1-460 ##label TIGR
es GB:U32786; GB:L4
                                                                  nucleic acid sequence not shown; translation not shown
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Pred. No. 1.38e+02;
GB:L42023; NID:g1574605; PID:g1574617;
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#authors
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ENTRY
TITLE
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CLASSIFICATION #superfamily con:
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Best Local Similarity 50.0%;
Conservative
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Best Local Similarity 100.0%;
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#title
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ##molecule_type DNA
##residues 1-141 ##label BUL
##cross-references GB:U67504; GB:L77117; NID:g1591248; PID:g1591254;
##cross-references TIGR:MJ0349; PID:g1510625
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Tomb, J.F.; Adams, M.D.; Reich, C.I.; Overbeek, R.;
Kirkness, E.F.; Weinstock, K.G.; Merrick, J.M.; Glodek, A.;
Scott, J.L.; Geoghagen, N.S.M.; Weidman, J.F.; Fuhrmann,
J.L.; Nguyen, D.; Utterback, T.R.; Kelley, J.M.; Peterson,
J.D.; Sadow, P.W.; Hanna, M.C.; Cotton, M.D.; Roberts,
K.M.; Hurst, M.A.; Kaine, B.P.; Borodovsky, M.; Klenk,
H.P.; Fraser, C.M.; Smith, H.O.; Woese, C.R.; Venter, J.C.
Science (1996) 273:1058-1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              #superfamily conserved hypothetical protein MJ0080
#length 141 #molecular-weight 16132 #checksum 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Complete genome sequence of the methanogenic archaeon, Methanococcus jannaschii.
                                                                                                                                                                                                                                                                                                    F69804 #type complete
hypothetical protein yfiT - Bacillus subtilis
#formal_name Bacillus subtilis
05-pec-1997 #sequence_revision 05-pec-1997 #text_change
                                                                                                                                                                                                         Kunst, F.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #formal_name Methanococcus jannaschii
13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change
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            unst, F.; Ogasawara, N.; Moszer, I.; Albertini, A.M.;
Alloni, G.; Azevedo, V.; Bertero, M.G.; Bessieres, F.;
Bolotin, A.; Borchert, S.; Boriss, R.; Boursier, L.; Brans,
A.; Braun, M.; Brignell, S.C.; Bron, S.; Brouillet, S.;
Bruschi, C.V.; Caldwell, B.; Capuano, V.; Carter, N.M.;
Choi, S.K.; Codani, J.J.; Connerton, I.F.; Cummings, N.J.;
Daniel, R.A.; Denizot, F.; Devine, K.M.; Duesterhoeft, A.;
Ehrlich, S.D.; Emmerson, P.T.; Entian, K.D.; Errington, J.;
Fabret, C.; Ferrari, E.; Foulger, D.; Fritz, C.; Fujita,
M.; Fritz, C.; Fujita, M.; Entitz, C.; Fujita,
M.; Fujita, Y.; Fuma, S.; Galizzi, A.; Galleron,
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translation not shown
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Pred. No. 1.90e+02;
3; Mismatches C
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Pred. No. 1.38e+02;
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Best Local Similarity 66.7%;
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##residues 1-178 ##label KUN
##cross-references GB:Z99108; GB:AL009126; NID:g2633055; PID:e1182829;
PID:g2633163
##experimental_source strain 168
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                                                                                                                                                                                                                                                                                   Bevan, M.; Bancroft, I.; Bent, E.; Love, K.; Goodman, H.; Dean, C.; Bergkamp, R.; Dirkse, W.; Van Staveren, M.; Stiekema, W.; Drost, L.; Ridley, P.; Hudson, S.A.; Pattel, K.; Murphy, G.; Piffanelli, P.; Wedler, H.; Wedler, E.; Wambutt, R.; Weitzenegger, T.; Pohl, T.M.; Terryn, N.; Gielen, J.; Villarroel, R.; De Clerck, R.; Van Montagu, M.; Gielen, J.; Villarroel, R.; De Clerck, R.; Van Montagu, M.;
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A71400
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Nature (1997) 390:249-256
The complete genome sequence of the Gram-positive bacterium Bacillus subtilis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             probable resistance gene - Arabidopsis thaliana
#formal_name Arabidopsis thaliana
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#length 178 #molecular-weight 20666 #checksum
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Lecharny, A.; Auborg, S.; Gy, I.; Kreis, M.; Iao, N.; Kavanagh, T.; Hempel, S.; Kotter, P.; Entlan, K.D.; Rieger, M.; Schaeffer, M.; Funk, B.; Mueller-Auer, S.; Silvey, M.; James, R.; Montfort, A.; Pons, A.; Puigdomenech, P.; Douka, A.; Voukelatou, E.; Milioni, D.; Hatzopoullos, P.; Piravandi, E.; Obermaier, B.; Hilbert, H.; Duesterhoft, A.; Moores, T.; Jones, J.D.G.; Eneva, T.; Palme, K.; Benes, V.; Rechman, S.; Ansorge, W.; Cooke, R.; Berger, C.; Delseny,
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Search completed: Thu Apr
Job time: 29 secs.
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Best Local Similarity
Matches 4; Conser
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Best Local Similarity 66.7%;
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#title Analysis of 1.9 Mb of contiguous sequence from chromosome 4
#cross-references MUID:98121113
#cross-references MUID:98121113
                                                                                                                                                                               #map_position 3R
#map_position 3R
#ARY #length 128 #molecular-weight 15117
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                                                                                                                                                                                                                                                                                                                                                  #authors
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MARY #length 1038
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                                                                                                                                                                                                                                              ##residues 1-128 ##label FEL
##cross-references EMBL:X59720; NID:g1907116; PID:e264569; PID:g1907219;
MIPS:YCR082w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ##molecule_type DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ##status
                                                                                                                                                                                                                                                                                             ##molecule_type DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ##cross-references GB:Z97342; NID:g2245031; PID:e327023; PID:g2245047
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                                                                                              88 KQKWI 92
                                                                 1 KQKWVQ 6
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                                                               KOKWV 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                                                                                                                                                                                                                            readmann, H.; Mannhaupt, submitted to the Protein S19497
                                                                                                                                                                                                                                                                                                                                                                S19497
S19429
                                                                                                                                                                                                                                                                                                                                                                                                      Terrevisiae)
#formal_name Saccharomyces cerevisiae
31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                           $19497 #type complete
hypothetical protein YCR082w - yeast (Saccharomyces
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                                                                                                                               83.0%;
larity 80.0%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                               14-Nov-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1-1038 ##label BEV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              preliminary; nucleic acid sequence not shown; translation not shown
               1 07:32:52 1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                #molecular-weight 117379 #checksum 3349
                                                                                                                               Score 44; DB 2; I
Pred. No. 2.62e+02;
1; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 45; DB 2; L
Pred. No. 1.90e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                             G.; Vetter, I.
Sequence Database, March 1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1038;
                                                                                                                                                               Length 128
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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Thu Apr 1 07:31:07 1999; MasPar time 2.11 Seconds 76.257 Million cell updates/sec Tabular output not generated.

Title: >US-08-927-939-9
Description: (1-6) from US08927939.pep
Perfect Score: 53
Sequence: 1 KQKWVQ 6

Scoring table: PAM 150
Gap 15

Searched: 74019 seqs, 26840295 residues

Post-processing: Minimum Match 0% Listing first 100 summaries

Database: swiss-prot36 1:swissprot

Statistics: Mean 22.666; Variance 35.225; scale 0.643

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match L	Length D	BB	<del>-</del>		
: ا ا				,	ť	Description	Fred. No.
۲	53	100.0	99	-:	MCP1_HUMAN	MONOCYTE CHEMOTACTIC P	4.26e+00
N	53	100.0	99	_	MCP2_BOVIN		4.26e+00
ω	53	100.0	99	-	MCPA_BOVIN	CHEMOTACTIC	4.26e+00
4	53	100.0	99	_	MCP1_PIG		4.26e+00
ر.	53		101	_	MCP1_CANFA		4.26e+00
σ	53		125	_	MCP1_RABIT	MONOCYTE CHEMOTACTIC P	4.26e+00
7	49	92.5	98	_	MCP4_HUMAN	MONOCYTE CHEMOTACTIC P	2.02e+01
œ	49		101	μ.	IL8_BOVIN	INTERLEUKIN-8 PRECURSO	2.02e+01
٥	49		101	۲	IL8_CANFA	INTERLEUKIN-8 PRECURSO	2.02e+01
10	49		101	1	IL8_RABIT	INTERLEUKIN-8 PRECURSO	2.02e+01
11	49		101	H	IL8_SHEEP	INTERLEUKIN-8 PRECURSO	2.02e+01
12	49		103	۳	IL8_PIG	INTERLEUKIN-8 PRECURSO	2.02e+01
13	47		651	اسا	PSTA_MYCPN	PHOSPHATE TRANSPORT SY	4.26e+01
14	46		96	۳	EOTA_CAVPO	EOTAXIN PRECURSOR (EOS	6.15e+01
15	46		97	ч	EOTA_HUMAN		6.15e+01
16	46	86.8	97	_	EOTA_MOUSE		6.15e+01
17	46		97	Н	EOTA_RAT	_	6.15e+01
18	46		99	Н	MCP2_PIG	MONOCYTE CHEMOTACTIC P	6.15e+01
19	46		99	۲	MCP3_HUMAN	MONOCYTE CHEMOTACTIC P	6.15e+01
20	46		101	<u>س</u>	IL8_CAVPO		6.15e+01
21	46		120	_	MCP1_CAVPO	MONOCYTE CHEMOTACTIC P	6.15e+01
22	46		266	۳	EL1_BOVIN	ELASTASE 1 PRECURSOR (	•
23	46	86.8	396	-	YB0F_SCHPO	HYPOTHETICAL 44.3 KD P	6.15e+01

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RESULT RE
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SEQUENCE OF 24-99.
MEDLINE; 89184525.
ROBINSON E.A., YOSHIMURA T., LE
SHABANOWITZ J., HUNT D.F., APPE
PROC. NATL. ACAD. SCI. U.S.A. 8
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MEDLINE: 89165862.
FURUTANI Y., NOMURA H., N
LARSEN C.G., OPPENHEIM J.
BIOCHEM. BIOPHYS. RES. CC
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01-JAN-1990 (REL. 13, CREATED)
01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)
15-JUL-1990 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOTACTIC AND ACTIVATING FACTOR) (MCAF) (MONOCYTE SECRETORY PROTEIN JE)
AND ACTIVATING FACTOR) (MCAF) (MONOCYTE SECRETORY PROTEIN JE)
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P13500;
                                         SEQUENCE OF 29-53 AND OF MEDLINE; 90211336.
DECOCK B., CONINGS R., BIOCHEM. BIOPHYS. RES.
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                                                                                                                                                                                                                                                     YOSHIMURA T., LEONARD E.J.;
ADV. EXP. MED. BIOL. 305:47-56(1991).
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HOMO SARPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
EUTHERIA; PRIMATES.
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LEONARD E.J.;
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       STRUCTURE MODELLING
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OL. 9:4687-4695(1989)
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745
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ES. COMMUN. 169:346-351(1990).
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                                                                                                 82-92
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                                       LENAERTS J.-P., BILIAU A., COMMUN. 167:904-909(1990).
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YQA4_CAEEL
YDM6_SCHPO
POLG_PYFV1
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                                                                                                                                     86:1850-1854(1989)
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SHIMA K.;
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HYPOTHETICAL 85.5 KD Z
HYPOTHETICAL 105.1 KD
GENOME POLYPROTEIN (CO
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                                                           VAN DAMME
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   EMBL; M28224; G338007;
EMBL; S69738; G545465;
EMBL; S1513; G240868;
EMBL; A17786; G641145;
PIR; R35474; A35474.
PIR; S03339; S03339;
PDB; IDOK; 12-MAR-97.
PDB; IDOM; 14-OCT-96.
PDB; IDOM; 14-OCT-96.
PDB; IMCA; 15-OCT-94.
                 CHAIN
MOD_RES
DISULFID
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MUTAGEN
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CYTOKINE;
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EMBL;
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GRONENBORN A.M., CLORE G.M.;
PROTEIN ENG. 4:263-269(1991)
[11]
MUTAGEN
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HANDEL T.M., DOMAILLE P.J.;
BIOCHEMISTRY 35:6569-6584(1996).
                                                                                                                                                       SIGNAL
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ZHANG Y.J.,
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J. EXP. MED.
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M30816, G386961, J
M31625, G386961, J
M24545, G307163, J
M28226, G338009, J
M37719, G434514, J
M37719, G434514, J
M28225, G338007, J
M28223, G38007, J
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[TE; PS00472;
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ED. 183:681-685(1996).
 24
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                                                                                                                                                                     SMALL_CYTOKINES_CC;
XIS; SIGNAL; INFLAMM
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KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.;
FEBS LETT. 395:277-282(1996).
-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND BASOPHILS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 X-RAY CRYSTALLOGRAPHY (1.85 ANGSTROMS).
MEDLINE; 97143315.
LUBKOWSKI J., BUJACZ G., DOMAILLE P.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EFFECT OF DELETION OF N-TERMINAL RESIDUES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ANG Y.J., RUTLEDGE B.J., ROLLINS B.J.; BIOL. CHEM. 269:15918-15924(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BUT NOT NEUTROPHILS OR EOSINOPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. HAS BEEN IMPLICATED IN THE PATHOGENESIS OF DISEASES CHARACTERIZED BY MONOCYTIC INFILITARIES, LIKE PSORIASIS, RHEUMATOI ARTERITIS OR ATHEROSCLEROSIS. MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF ATHEROSCLEROSIS.

SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.

PIM: PROCESSING AT THE N-TERMINUS CAN REGULATE RECEPTOR AND TARGE CELL SELECTIVITY. DELETION OF THE AMINO- TERMINAL RESIDUE CONVERNIT FROM AN ACTIVATOR OF BASOPHIL TO AN EOSINOPHIL CHEMOATTRACTANT SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC.) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CZ G., DOMAILLE P.J.,
4:64-69(1997).
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POTENTIAL.
A -> T.
MISSING: LOSS (
MISSING: LOSS (
                                                                                                                                                                        MONOCYTE CHEMOTACTIC PROTEIN 1. PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                                                                                                                                                                INES_CC; 1.
INFLAMMATORY RESPONSE; 3D-STRUCTURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HANDEL T.M.,
   မ္က မ္က
   ACTIVITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           I., DAHINDEN C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WLODAWER
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Best Local Similarity
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Best Local
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Q09141;
Q1-NOV-1995
Q1-NOV-1995
Q1-NOV-1998
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DISULFID
SEQUENCE
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P28291;
01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1A PRECURSOR (MCP-1A)
SEMINAL FLUID PROTEIN).
BOS TAURUS (BOVINE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CYTOKINE;
SIGNAL
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MEDLINE; 94114084.
WEMPE F., HANES J., SCHEIT K.H.;
DNA CELL BIOL. 13:1-8(1994).
-i- FUNCTION: CHEMOTACTIC FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE CHEMOTACTIC PROTEIN 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA;
EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                          MCPA_BOVIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SCYA8 OR MCP2
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SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOK
C-C) (CHEMOKINE CC).
L; S67954; E118856; -
L; S67954; E34897; -
SITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KQKWVQ
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llarity 100.0%;
Conservative
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XIS; SIGNAL; HEPARIN-BINDING; INFLA
23 BY SIMILARITY
99 MONOCYTE CHEMOTACTIC PF
24 PYRROLIDONE CARBOXYLIC
SIMILARITY).
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MISSING: 83% REDUCTION IN A
D-A: 90% REDUCTION IN A
N->A: 50% REDUCTION IN A
R->F: 95% REDUCTION IN A
S->Q: 40% REDUCTION IN A
S->Q: 40% REDUCTION IN A
Y->D: LOSS OF ACTIVITY.
R->L: LOSS OF ACTIVITY.
D->L: 90% REDUCTION IN A
                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 53; DB 1; I
Pred. No. 4.26e+00;
0; Mismatches 0
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Pred. No. 4.26e+00;
0; M1smatches 0;
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D->L: 90%
5355B695
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BY SIMILARITY.
9BA2CD26 CRC32;
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TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 99;
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                                                                                   (MCP-1) (ACIDIC
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Best Local Similarity
Matches 6; Conser
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P42831;
01-NOV-1995 (REL. 3
01-NOV-1995 (REL. 3
15-JUL-1998 (REL. 3
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DISULFID
SEQUENCE
SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA
-I- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS
NEUTROPHILS.
-I- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRI
-I- SIMILARITY: BELONGS TO THE INTERCRINE BETA
C-C) (CHEMOKINE CC).
EMBL; Z48479; G683717; -.
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                                                                                                                                                                                                                SEQUENCE FROM N.A.
MEDLINE; 94183284.
HOSANG K., KNOKE I., K
BIOCHEM. BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                             SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHO
EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PIR;
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-!- SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE; 94338337.
WEMPE F., KUHLMANN J.K
BIOCHEM. BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
TISSUE-SEMINAL PLA
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                                                                                                                                    TISSUE-BRAIN;
ZACH O.R.F.;
                                                                                                                                                                                                                                                                                                                                                                           SCYA2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 92181448
WEMPE F., EINSPAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WEMPE F., HENSCHE
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                                                                                                                                                                            SEQUENCE FROM
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JC2336; JC2336.
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BIOL. 10:671-679(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHEMOKINE
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                                                                                                                                                                                                                                                                                                                                 CHORDATA;
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                                                                                                                                                                                                                KLAUDINY J., WEMPE F., WUTTKE W., S. COMMUN. 199:962-968(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ., SCHEIT K.H.;
COMMUN. 202:1272-1279(1994).
TIC FACTOR THAT ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ., SCHEIT K.H.;
COMMUN. 183:232-237(1992).
                                          HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY)
TO THE INTERCRINE BETA FAMILY (SMALL CYTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
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4.26e+00;
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                                                                                                                                                                                                                                    SCHEIT K.H.;
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Best Local S
Matches
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AN LUMDSEY M.L., HAWKINS H.K., BIRDSALL H.H., MACKAY C.R., LAROSA G.J.,

AN ROSSEN R.D., SMITH C.W., ENTMAN M.L.;

AN CHICATION CHICAGO IN THE COURSE OF THE INFLAMMATORY

C. REPERFUSED MYOCARDIUM.

C. INDUCTION: BY THE ALPHA.

C. INDUCTION: BY THE ALPHA.

C. INDUCTION: BY THE ALPHA.

C. INSUBNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).

C. INSUBNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM SAND INTRAFASCICULAR

C. VEINS, AND INFILTRATING LEUROCYTES.

C. INSUBLIARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE OF EMPL.: 1739673: G1144186. -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
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MOD_RES
MCP1_RABIT
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CANIS FAMILIARIS (DOG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-UTL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                           SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE;
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                                                                                                                                 79 KQKWVQ 84
                                                                                                                                                                            Local Similarity 100.0% es 6; Conservative
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Similarity 100.0%;
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  STANDARD;
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XIS; SIGNAL; INFLAMMATORY RESPONSE.

XIS; SIGNAL; INFLAMITY.

BY SIMILARITY.

99 MONOCYTE CHEMOTACTIC PROTEIN 1.

99 PYRROLIDONE CARBOXYLIC ACID (BY
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BY SIMILARITY.
; ECC3AFB4 CRC32;
                                                                                                                                                                                                                                                                                                                             MONOCYTE CHEMOTACTIC PROTEIN 1. PYRROLIDONE CARBOXYLIC ACID (BY SIMILARITY).
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  PRT;
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Mismatches 0;
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                                                                                                                                                                                                                   Length 101;
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01-DEC-1992
01-DEC-1992
15-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MCP4_HUMAN STANDARD; PRT; 98 AA.
099615;
15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 4 PRECURSOR (MCP-4)
                                                                                                                                                                                                                        GARCIA-ZEPEDA E.A., COMBADIERE C., LAVIGNE F., HAMID Q., MURPHY P.M., J. IMMUNOL. 157:5613-5626(1996).
                                                                 UGUCCIONI M., LOETSCHER P., FORS
LI Y., KREIDER B., GAROTTA G., T
J. EXP. MED. 183:2379-2384(1996)
                                                                                                                                                                                                                                                                                                                                                                                     HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHEMOATTRACTANT PROTEIN 4) (CK-BETA10) (NCC-1). SCYA13 OR MCP4 OR NCC1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
ECC) (CHEMOKINE CC).
EMBL; M57440; G165470; -.
HSSB; P13500; 1MCA.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORYCTOLAGUS CUNICULUS (RABBIT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           O1-DEC-1992 (REL. 24, CREATED)
O1-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
                         SEQUENCE FROM N.A.,
                                                                                                                                                            TISSUE-FETAL;
                                                                                                                                                                                 SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                              MEDLINE; 97113354.
                                                                                                                                                                                                                                                                                                                      TISSUE-HEART;
                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
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J. IMMUNOL. 146:3483-3488(1991).
-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-NEW ZEALAND WHITE; MEDLINE; 91225489.
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    TISSUE=FETAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CARBOHYD
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                           SEQUENCE
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                                                                                      FORSSMANN U., DEWALD B., G., THELEN M., BAGGIOLINI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 53; DB 1; I
Pred. No. 4.26e+00;
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BY SIMILARITY.
BY SIMILARITY.
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MONOCYTE CHEMOTACTIC PROTEIN 1.
                                                                                                                                                                                                                                                                                                                                                                                                          VERTEBRATA; TETRAPODA; MAMMALIA;
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LUSTER A.D.;
                                                                                                                                                                                   17-98
                                                                                                                                                                                                                                                                     M.E.,
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                                                                                          M.;
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RESULT AND PROPERTY OF THE PRO
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Best Local S
Matches
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SIGNAL
CHAIN
MOD_RES
DISULFID
DISULFID
CARBOHYD
                                                                                                                                                                                                                                                                                                                                       01-NOV-1997
01-NOV-1997
01-NOV-1997
                      MORSEY M.A., POPOWYCH Y., KOWALSKI J., CAMPOS M., BABIUK L.A.; CAMPOS M., BABIUK L.A.; MICROB. PATHOG. 20:203-212(1996).
-i- FUNCTION: IL-8 IS A CHEMOTACTIC FAC BASOPHILS, AND T-CELLS, BUT NOT MOI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DANTE M., GIBSON A.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,
                                                                                                                                            SEQUENCE FROM N.A. MEDLINE; 96304552.
                                                                                                                                                                                                                                                               SOB
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BERKHOUT T.A., SARAU H.M., MOORES K., WHITE J.R., ELSHOURBAGY N., APPELBAUM E., REAPE T.J., BRAWNER M., MAKWANA J., FOLEY J.J., SCHMIDT D.B., IMBURGIA C., MACNULTY D., MATTHEWS J., O'DONNELL K., O'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPHEE C.; J., BIOL. CHEM. 272:16404-16413(1997).
                                                                                                                                                                                                                                                                                                            01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDAT
INTERLEUKIN-8 PRECURSOR (IL-8).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
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                                                                                                                                                                                                                   EUTHERIA;
                                                                                                                                                                                                                                            EUKARYOTA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       78 KEKWVQ 83
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE SPECIFICITY: WIDELY EXPRESSED. FOUND IN SMALL INTESTINE,
THYMUS, COLON, LUNG, TRACHEA, STOMACH AND LYMPH NODE. LOW LEVELS
SEEN IN THE PULMONARY ARTERY SMOOTH MUSCLE CELLS.
THIS PROTEIN CAN BIND HEPARIN.
PTM: ONE MAJOR ISOFORM MCP-4, AND TWO MINOR ISOFORMS (LA)MCP-4 AND
(FNPQGLA)MCP-4 ARE PRODUCED BY DIFFERENTIAL SIGNAL CLEAVAGE.
(LA)MCP-4 IS ABOUT 30 FOLD LESS ACTIVE THAN MCP-4.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
L; U46767; G1732123; ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BASOPHILE AND ECSINOPHILS, BUT NOT NEUTROPHILS. SIGNALS THROUGH
CCR2B AND CCR3 RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF
LEUKOCYTES AT BOTH SIDES OF ALLERGIC AND NONALLERGIC INFLAMMATION.
MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL
WALL DURING THE DISEASE PROCESS OF ARTHEROSCLEROSIS. MAY PLAY A
ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO
EXCERNOUS PATHOGENS.
MASS SPECTROMETRY: MM-8976; MM_ERR-30; METHOD-MALDI; RANGE-22-98.
MASS SPECTROMETRY: MM-8975; MM_ERR-30; METHOD-MALDI; RANGE-24-98.
INDUCTION: BY INTERLEUKIN-1 AND TNR-ALPHA.
INDUCTION: BY INTERLEUKIN-1 AND TNR-ALPHA.
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       NEUTROPHIL
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; METAZOA; CHORDATA;
ARTIODACTYLA.
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IS A CHEMOTACTIC FACTOR THAT T-CELLS, BUT NOT MONOCYTES. I IVATION. IT IS RELEASED FROM S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92.5%;
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Pred. No.
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BY SIMILARITY.
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                                                                                                                                                                                                                                         VERTEBRATA;
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  FROM SEVERAL
                                                                                                                                                                                                                                         TETRAPODA; MAMMALIA;
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I ATTRACTS NEUTROPHILS, IT IS ALSO INVOLVED IN SEVERAL CELL TYPES IN
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Best Local Similarity
Matches 5; Conser
                                                                                                                                 RESPONSE TO AN INFLAMMATORY STORMULT: HOMODIMER.

-!- SIMILARITY: BELONGS TO THE INFOCATION C-X-C) (CHEMOKINE CXC).

EMBL: D18772; G517100; -..

EMBL: D14285; G475152; -..

EMBL: U10308; G607814; -..
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P41324;
01-FEB-1995
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DISULFID
SEQUENCE
 CHAIN
DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                MENDOZA L.H., DALY T.J., HUGHES B.J., YOUKER K.A., HAWKINS H.K., MICHAEL L.H., ROT A., ENTMAN M.L.;
J. CLIN. INVEST. 95:89-103(1994).
-i- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHIL BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MATSUMOTO Y., MOHAMED A., GOITSUKA R., TSUJIMOTO H., ISHIKAWA J., HOTTA K., SUZICYTOKINE 6:455-461(1994).
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01-NOV-1995
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                                                                          SIGNAL
                                                                                               CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 95114148
KUKIELKA G.L., SM
                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN-MONGREL; MEDLINE; 951141.
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ISHIKAWA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CANIS FAMILIARIS (DOG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHAIN
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                                                                                                                   PROSITE;
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SUBUNIT: HOMODIMER (BY SIMILARITY).
SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SIC-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             UENCE FROM N.A.
LINE; 94010328.
IKAWA J., SUZUKI S.,
E 131:305-306(1993).
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S82598; G16000
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PS00471; SMALL_CYTOKINES_CXC; 1.
CHEMOTAXIS; INFLAMMATORY RESPONSE;
1 22
BY SIMILARITY.
23 101 INTERLEUKIN-8.
                                                                                                                     PS00471;
                                                                                              PS00471; SMALL_CYTOKINES_CXC; 1. CHEMOTAXIS; INFLAMMATORY RESPONSE;
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(REL. 31, LAST SEQUENCE UF
(REL. 32, LAST ANNOTATION
-8 PRECURSOR (IL-8).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
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     11280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUZUKI K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HOTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ONODERA T., KATO H.,
, HASEGAWA A., FURUSA
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     WW;
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Pred. No.
1; Misma
 BY SIMILARITY.
INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
7C49D62D CRC:
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BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERTEBRATA;
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                                                                                                                                                                                                           INTERCRINE
                                                                                                                                                                                                                                                  STIMULUS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HIROTA Y .;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        UPDATE)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
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     CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FURUSAWA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Υ.,
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                                                                                                                                                                                                             ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ALPHA FAMILY (SMALL CYTOKINE
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                                                                                                 SIGNAL
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                                                                                                                                                                                                                                                                  S NEUTROPHILS,
SO INVOLVED IN
CELL TYPES IN
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Query Match

92.5%;

Score

49;

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Best Local Similarity
Matches 5; Conse
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                                                                                                                                                                      IL8_SHEEP STAN
P36925;
O1-JUN-1994 (REL. 2
O1-JUN-1994 (REL. 2
O1-NOV-1995 (REL. 3
                                                        OVIS ARIES EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DISULFID DISULFID CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BEAUBIEN B.C., COLLINS P.D., JOSE P.J., TOTTY N.F., HSUAN J.,
WILLIAMS T.J.;
BIOCHEM. J. 271:797-801(1990).
PICCHEM. J. 271:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P19874;

01-FEB-1991 (REL. 17, CREATED)

01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)

01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)

INTERLEUKIN-8 PRECURSOR (IL-8) (NEUTROPHIL ATTRACTANT/ACTIVATION PROTEIN-1) (NAP-1) (PERMEABILITY FACTOR 1) (RPF1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PIR; S13052; S13052.
HSSP; P10145; 3IL8.
PROSITE; PS00471; SM
                                   EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN-NEW ZEALAND MEDLINE; 91058518.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE OF 23-53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 91225489.
YOSHIMURA T., YUHKI N.;
J. IMMUNOL. 146:3483-3488(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
STRAIN-NEW ZEALAND WHITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORYCTOLAGUS
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                                                                                                                                              INTERLEUKIN-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 83.3%; nes 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                     81 KEKWVQ 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81
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                                                                                                                                                                                                                                                                                                                                                                                                           KOKWVO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -X-C) (CHEMOKINE CXC).
M57439; G165553; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; METAZOA; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CHEMOTAXIS;
                                ARTIODACTYLA.
                                                           (SHEEP).
METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1
23
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METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      92.5%;
larity 83.3%;
Conservative
                                                                                                                                                 PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AA;
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                                                                                                                                                                                                                                                                                             STANDARD;
                                                                                                                                                                   29, CREATED)
29, LAST SEQUENCE UPDATE)
32, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SMALL_CYTOKINES_CXC; 1.
KIS; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22
101
61
77
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       50
11402
                                                        CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RABBIT)
                                                                                                                                              (IL-8).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
K -> I (IN REF. 2)
W; CB32CC30 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      e 49; DB 1; Ler
. No. 2.02e+01;
Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
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RESULT IN THE SOLUTION OF THE 
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Best Local S
Matches
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IL8_PIG STAN

P26894; P22951;

01-AUG-1991 (REL. 1

01-AUG-1992 (REL. 2

01-OCT-1996 (REL. 3
                                        REVISION TO 23.
GOODMAN R.B.;
SUBMITTED (MAR-1
[5]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEOW H.F., YOSHIMURA T., WOOD P.R., COLDITZ I.G
IMMUNOL. CELL BIOL. 72:398-405(1994).
1- FUNCTION: II-8 IS A CHEMOTACTIC FACTOR THAT
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES.
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM
RESPONSE TO AN INFLAMMATORY STIMULUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE; 95121931.
LEGASTELOIS I., GREENLAI
GENE 150:367-369(1994).
                                                                                                                                GOODMAN R.B., FOSTER D.C., MATHEW FORSTROM J.W., MARTIN T.R.; BIOCHEMISTRY 31:10483-10490(1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HSSP; P10145; 3IL8.

PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.

CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C-X-C) (CHEMOKINE CXC).
EMBL; X78306; G463254; -.
EMBL; S74436; G786591; -.
                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 94103307.
LIN G., PEARSON A.E., S
WEISS D.J., MURTAUGH M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIGNAL
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HSSP; P10145; 3IL8.
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  STRAIN-YORKSHIRE;
                      SEQUENCE OF 26-45
                                                                                                                                                                                              TISSUE-LUNG;
MEDLINE; 930
                                                                                                                                                                                                                                    SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                          SUBMITTED
                                                                                                                                                                                                                                                                                            SANJANWALA
                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUS SCROFA (PIG)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INTERLEUKIN-8
                                                                                                                                                                                                                                                                                                                                    2
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                                                                                                                                                                                                                                                                                                                                                     BIOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 KOKWVO 6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUBUNIT: HOMODIMER.
SIMILARITY: BELONGS TO
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Similarity 83.3%;
5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                             FROM N.A.
94103307.
                                                                                                                                                                                            93041741.
                                                                                                                                                                                                                                                                                                                                                       CHEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; METAZOA; CHI
ARTIODACTYLA
                                                          (MAR-1996)
                                                                                                                                                                                                                                                                          (JUL-1991)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      34
36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REL. 19, CREATED)
REL. 23, LAST SEQUENCE UPDATE)
REL. 34, LAST ANNOTATION UPDATE)
PRECURSOR (IL-8) (ALVEOLAR MACROPHAGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ĀΑ;
                                                                                                                                                                                                                                                                                                                                                     269:77-85(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GREENLAND T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22
101
61
77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11292
                                                                                                                                                                                                                                    AND
                                                                                                                                                                                                                                                                          Ö
                                                            ď
                                                                                                                                                                                                                                                                                                                                                                                           SCAMURRA
                                                                                                                                                                                                                                                                        EMBL/GENBANK/DDBJ
                                                            EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   THE INTERCRINE
                                                                                                                                                                            MATHEWES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred.
1; N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 49;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INTERLEUKIN-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ARNAUD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                         R.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    re 49; DB 1; Le
1. No. 2.02e+01;
Mismatches 0;
                                                                                                                                                                                                                                    ဝှု
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FACTOR THAT ATTRACTS NEUTROPHILS, MONOCYTES. IT IS ALSO INVOLVED IN LEASED FROM SEVERAL CELL TYPES IN
                                                                                                                                                                          S.L.,
                                                                                                                                                                                                                                    26-45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P.,
                                                                                                                                                                                                                                                                                                                                                                                             ZHOU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MORNEX J.F.,
                                                                                                                                                                                                                                                                                                                                                                                         Υ.,
                                                            DATA
                                                                                                                                                                            OSBORN
                                                                                                                                                                                                                                                                          DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       H.G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 101;
                                                                                                                                                                                                                                                                                                                                                                                           BAARSCH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                          S.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHEMOTACTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORDIER
                                                                                                                                                                            KUIJPER J.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FACTOR
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Best Local S
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C-X-C) (CHEMOKINE CXC).
EMBL; M86923; G164521; -.
EMBL; X61151; G516197; -.
EMBL; M99367; G1235612; -.
PIR; A44253; A44253.
PIR; A39819; A39819.
                                                                                                                                                                                                                                                                                                                             01-NOV-1997
01-NOV-1997
01-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHAIN
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GOODMAN R.B., FORSTROM J.W., OSBORN S.G., CHI E.Y., MARTIN T.R.;
J. BIOL. CHEM. 266:8455-8463(1991).
-I- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS.
-I- SUBUNIT: HOMODIMER.
-I- TISSUE SPECIFICITY: ALVEOLAR MACROPHAGES.
-I- TINDUCTION: BY LIPOPOLYSACCHARIDE.
                                                     TRANSMEM TRANSMEM
                                                                                    PROSITE; P: TRANSPORT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CONFLICT
            TRANSMEM
TRANSMEM
                                                                                                                                                                                                                                                                                  MYCOPLASMA PNEUMONIAE. PROKARYOTA; TENERICUTES;
                                                                                                                                                                                                                                                                                                                                                             PSTA_MYCPN P75185;
                                                                                                                                                                                                                            SEQUENCE FROM N.A.
STRAIN-ATCC 29342 / M129;
MEDLINE; 97105885.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CYTOKINE; CHEMOTAXIS; SIGNAL 1 2
                                TRANSMEM
                                          TRANSMEM
                                                                                                                                                                                              NUCLEIC ACIDS RES.
                                                                                                                                                                                                                 HIMMELREICH R., HILBERT H.,
                                                                                                                                                                                                                                                                        MYCOPLASMATACEAE
                                                                                                                                                                                                                                                                                                                  PHOSPHATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ISSP; P10145;
                                                                                                                                                                                                          IERRMANN R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity les 5; Conse
                                                                                                                                                                                                                                                                                                                                                                                                                                       81 KEKWVQ 86
                                                                                                                                                                                                                                                                                                                                                                                                                   \mathbf{L}
                                                                                                                             FUNCTION: COULD BE PART OF A BINDING-PROTEIN-DEPENDENT TRANSPORT SYSTEM FOR PHOSPHATE; PROBABLY RESPONSIBLE FOR THE TRANSLOCATION OF THE SUBSTRATE ACROSS THE MEMBRANE BY SIMILARITY.
SUBCELLULAR LOCATION: INTEGRAL MEMBRANE PROTEIN (POTENTIAL).
SIMILARITY: WITH INTEGRAL MEMBRANE COMPONENTS OF OTHER BINDING-PROTEIN DEPENDENT TRANSPORT SYSTEMS. BELONGS TO THE CYSTW
                                                                                                                                                                                                                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                     SUBFAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                  |:||||
|KQKWVQ 6
                                                                                               AE000023; G1673899;
E; PS00402; BPD_TRAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0145; 3118.
P$00471; SMALL_CYTOKINES_CXC; 1.
P$00471; SMALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          91217086
                                                                                                                                                                                                                                                                                                                   TRANSPORT
                                                                                                                                                                                                                                                                                                               (REL. 35, CREATED)
(REL. 35, LAST SEQUENCE UPDATE)
(REL. 35, LAST ANNOTATION UPDAT
(RANSPORT SYSTEM PERMEASE PROTEIN
                                                                                     PHOSPHATE
  22
64
107
143
368
417
451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26
34
33
87
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                              24:4420-4449(1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  103
61
77
34
87
427
127
163
388
437
471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      92.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11633
                                                                                       TRANSPORT;
                                                                                                  RANSP
                                                                                                                                                                                                                                                                                 MOLLICUTES; MYCOPLASMA; MYCOPLASMATALES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY.
BY SIMILARITY.
RC -> CR (IN REF. 5).
K -> KK (IN REF. 2).
                                                                                                                                                                                                                   PLAGENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 49;
Pred. No.
          POTENTIAL.
POTENTIAL.
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POTENTIAL.
                                                                                             INN_MEMBR;
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                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A012D59D CRC32
                                                                                     TRANSMEMBRANE
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      49; DB 1; I
No. 2.02e+01;
                                                                                                                                                                                                                   Η.,
                                                                                                                                                                                                                                                                                                                  ON UPDATE)
PROTEIN PSTA HOMOLOG
                                                                                                                                                                                                                                                                                                                                                                        651 AA
                                                                                               FALSE_NEG
                                                                                                                                                                                                                  PIRKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 103;
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E
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                                                                                                                                                                                                                   B.-C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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THE RESULT OF TH
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Best Local S
Matches
                                   Query Match
Best Local S
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUN-1994 (REL. 01-OCT-1996 (REL. 15-JUL-1998 (REL. EOTAXIN PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TRANSMEM
TRANSMEM
SEQUENCE
                                                                                                             DISULFID
DISULFID
CARBOHYD
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EOTA_CAVPO
P80325;
                                                                                                                                                                                                                                                                                                                                                                        CHAIN
                                                                                                                                                                                                                                                                                                                    C-C) (CHEMOKINE CC).
EMBL; U18941; G687656; -.
EMBL; X77603; G602552; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 95091818.
JOSE P.J., ADCOCK I.M., GR.
WELLS T.C., WILLIAMS T.J.,
                                                                                                                                                                                                                                            PROSITE; PS00472; SMALL_CYTOKINES_CC; EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLY. INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 95173589.
ROTHENBERG M.E., L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAVIA PORCELLUS (GUINEA PIG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                            SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-HARTLEY; T
MEDLINE; 94157409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BIOCHEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE; 95091818.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rissue-Lung;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           635
                                                                                                                                                                                                                                                                                                      ISSP; P13500;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE OF 24-96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           THENBERG M.E., LUSTER A.D., LILLY C.M., DRAZEN J.M., LEDER P., EXP. MED. 181:1211-1216(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
76 KKKWVQ 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 KQKWVQ 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14
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                                     Similarity 5; Conse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   535
613
651
                                   86.8%;
larity 83.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                    1MCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ß,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29, CREATED)
34, LAST SEQUENCE UPDATE)
36, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      555
633
72747
                                                                                                             88
10753
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                                                                                                                                                      96
72
93
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GRIFFITHS-JOHNSON D.A.,
J., POWER C.A.;
                                                                                                                 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₩;
                                   Score 46;
Pred. No.
0; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 47;
Pred. No.
1; Misma
                                                                                                                                EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
POTENTIAL.
D -> G (IN REF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    POTENTIAL.
POTENTIAL.
A480C49C
                                                                                                             ) -> G (IN REF. DD28C7E5 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            205:788-794(1994)
                                 re 46; DB 1; L4
1. No. 6.15e+01;
Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . No. 4.26e+01;
Mismatches 0;
                                                                                                                                                                                                                                                             _CC; 1.
GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1;
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                                                                                                                              2).
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                                                                          Length
                                                                                                                                                                                                                                                                 SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BERKMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                     Indels
                                                                          96;
                                       0
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                                       Gaps
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THE PART OF THE PA
                                                                 C -!- SÜBCELLULAR LOCATION: EXTRACELLULAR.
C -!- PTM: O-GLYCOSYLATED (PROBABLE).
C -!- INDUCTION: BY THE PROBABLE).
C -!- SIMUCRING: BY THE ALPHA AND INTERFERON GAMMA.
C -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC).
C C-C) (CHEMOKINE CC).
PR EMBL; U44573; G1280441; -.
DR EMBL; U34780; G1185440; -.
DR EMBL; U34780; E221070; -.
DR EMBL; Z56291; E221070; -.
DR EMBL; Z75668; E251275; -.
DR EMBL; Z75668; E251275; -.
DR EMBL; Z75669; E251276; -.
DR EMBL; U46572; G2088509; -.
DR EMBL; Z92709; E329504; -.
DR EMBL; Z92709; E329504; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                    BARTELS J.
BIOCHEM. B
-!- FUNCTI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MORTON C.
GENOMICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=PLACENTA;
MEDLINE; 97312708.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 97445071.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHRISTOPHERS E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE; 96181758.
GARCIA-ZEPEDA E.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HEIN H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GARCIA-ZEPEDA E.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BIOCHEM. BIOPHYS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.,
TISSUE=FORESKIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KITAURA M., NAKAJIMA T., IMAI T., H
TIFFANY H.L., MURPHY P.M., YOSHIE O
J. BIOL. CHEM. 271:7725-7730(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MACKAY C.R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PONATH P.D., QIN S., RINGLER D.J., CLARK-LEWIS I., WANG J., KASS SMITH H., SHI X., GONZALO J.A., NEWMAN W., GUTIERREZ-RAMOS J.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. MEDLINE; 96181758.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EUKARYOTA; METAZOA; EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FISSUE-SMALL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LUSTER A.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                            FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, I FEATURE OF ALLERGIC INFLAMMATORY REACTIONS.
SUBCELLULAR LOCATION: EXTRACELLULAR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EPEDA E.A., ROTHENBERG M. C., LUSTER A.D.; 41:471-476(1997).
PSO0472; SMALL_CYTOKINES_CC; IL; CYTOKINE; CHEMOTAXIS; GLYGORY RESPONSE; POLYMORPHISM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SCHLUETER C.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INTESTINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             UETER C., RICHTER E., SCHROEDER J.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97:604-612(1996).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KULKE R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMUN. 225:1045-1051(1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IMAI T., HARADA S.,
, YOSHIE O.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     237:537-542(1997).
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E
                         GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WEREMOWICZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OWNBEY T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NOSO N., KULKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   75-88, AND VARIANTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMBADIERE
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                         SIGNAL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SCHROEDER
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                                                                                                                                                                                                                                                                                                                                                                                                         A PROMINENT
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C:-- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN C:-- FUNCTION: IN RESPONSE THE ACCUMULATION OF EOSINOPHILS (A PROMINENT FEATURE OF ALLERGIC INFLAMMATORY REACTIONS), BUT NOT LYMPHOCYTES, MACROPHAGES OR NEUTROPHILS.

C:-- INSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN THE THYMUS.

C:-- TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN THE THYMUS.

C:-- EXPRESSION INDUCIBLE IN THE LUNG (TYPE I ALVEOLAR EPITHELIAL EXPRESSION INTERFERON-GAMMA AND LIPOPOLYSACCHARIDE (LPS).

C:-- FIM: O-GLYCOSYLATED (PROBABLE).

C:-- FIM: O-GLYCOSYLATED (PROBABLE).

C:-- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CEMBL; U26426; 0995911; -...

REMBL; U40672; G1113937; -..

REMBL; U40673; G1113937; -..
                   Query Match
Best Local Similarity
Matches 5; Conser
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Best Local Similarity
Matches 5; Consei
                                                            DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EOTA_MOUSE
P48298;
01-FEB-1996
01-FEB-1996
15-JUL-1998
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CHAIN
DISULFID
DISULFID
VARIANT
VARIANT
VARIANT
VARIANT
                                                                                          CHAIN
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MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; C
                                                                                                                                                                                                                                                                                                             MEDLINE; 96158746.

GONZALO J.-A., JIA G.-Q., AGUIRRE
JENKINS N.A., LIN G.-S., KATZ H.,
GUTIERREZ-RAMOS J.-C.;
                                                                                                                      PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL;
                                                                                                                                                                                                                                                                                                                                                        STRAIN-C57BL/6J;
                                                                                                      SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EOTAXIN PRECURSOR
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                                                                                                                INFLAMMATORY
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                                                                                                                                                                                                                                                                                                                                                                                                                   ISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
77 KKKWVQ
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                                                                       7 RESPONSE.
1 23
24 97
32 57
33 73
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                    Conservative
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                                                                                                                                                                                                                                                                                                                                                      TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        33, CREATED)
33, LAST SEQUENCE UPDATE)
36, LAST ANNOTATION UPDATE)
(EOSINOPHIL CHEMOTACTIC PRO
                                                            10893
                              86.8%;
83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     86.8%;
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97
73
73
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                  Score 46; DB 1; I
Pred. No. 6.15e+01;
0; Mismatches 1
                                                         POTENTIAL.
EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
; F85A96BC CRC32;
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A -> T (IN CLONE :
R -> S (IN CLONE :
K -> R (IN CLONE :
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Pred. No. 6.15e+01
0; Mismatches
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EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                    LEDER P.;
92:8960-8964(1995).
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LICHTMAN A., COPELAND
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Best Local S
Matches
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P97545; 0087780;
15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION PROTEIN).

EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).

RATTUS NORVEGICUS (RAT).

EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                           01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2)
CHEMOATTRACTANT PROTEIN 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MCP2_PIG
P49873;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -i- PTM: O-GLYCOSYLATED (PROBABLE).
-i- SIMILARIY: BELONGS TO THE INTERCRINE
C-C) (CHEMOKINE CC).
EMBL; Y08358; E274141; -..
EMBL; U96637; G2098785; -..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-I- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTE:
-IRECTLY PROMOTES THE ACCUMILATION OF EOSINOPHILS, A PROMINENT
FEATURE OF ALLERGIC INFLAMMATORY REACTIONS (BY SIMILARITY).
-I- SUBCELLULAR LOCATION: EXTRACELLULAR.
                                                                                      MEDLINE; 95091716.
HOSANG K.K., KNOKE I.I.,
SCHEIT K.K.;
                                                                                                                                                                                                                                                                     SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
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                                                            BIOCHEM.
                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                            EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBMITTED
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                               FUNCTION:
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   BIND HEPARIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                  FROM N.A.
95091716.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PS00472; SMALL_CYTOKINES_
IL; CYTOKINE; CHEMOTAXIS;
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                            BIOPHYS. RES. COM
TION: CHEMOTACTIC
                                                                                                                                                                                                                                                  ARTIODACTYLA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (DEC-1996)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     , NEWTON
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422
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    86.8%;
83.3%;
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                                                               COMMUN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL/GENBANK/DDBJ
                                                                                                                  KLAUDINY J.J.,
                         FACTOR THAT ATTRACTS
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Pred.
0; M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       POTENTIAL.
L -> S (IN REF.
05B4ED45 CRC32;
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BY SIMILARITY.
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                                                                                                                                                                                                                                                                            VERTEBRATA; TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                         205:148-153(1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 46;
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GLYCOPROTEIN;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99
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                                                                                                                      WEMPE F.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COLEMAN
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                               MONOCYTES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                  (MONOCYTE
                                                                                                                      WUTTKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97;
                                                                                                                                                                                                                                                                            MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     THIS PROTEIN
                                                                                                                      W.W.,
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     FEBS LETT.
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DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                              01-DEC-1992 (REL. 24, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (MCP-3)
                                                                                                                                                                                                                                                                                                                                     HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; C
EUTHERIA; PRIMATES.
                                                                                                                       VAN DAMME J., PROOST P., LENA
J. EXP. MED. 176:59-65(1992).
                                                                                                                                                                                  MINTY A., CHALON P., GUILLEMOT J.
MAGAZIN M., MILOUX B., MINTY C.,
SHIRE D., FERRARA P., CAPUT D.;
                                                                                                                                                                                                                                     OPDENAKKER G., FITEN P., N
LAUREYS G., VAN DAMME J.;
GENOMICS 21:403-408(1994).
                                                                                                                                                                                                                                                                                           BIOCHEM.
                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A., MEDLINE; 93213290.
OPDENAKKER G., FROY!
                                                                                                                                                                                                                                                                                                                                                                       CHEMOATTRACTANT PROTEIN 3) (NC28).
                                                                                                                                                                                                                                                                                                                                                                                                                  MCP3_HUMAN
P80098;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL;
                                                    STRUCTURE BY NMR. MEDLINE; 97263733
                                                                                              STRUCTURE BY NMR, MEDLINE; 97053697
                                                                                                                                      MEDLINE; 92308855
                                                                                                                                                TISSUE-OSTEOSARCOMA;
                                                                                                                                                           SEQUENCE OF 30-99
                                                                                                                                                                           EUR. CYTOKINE
                                                                                                                                                                                                    MEDLINE; 93305913.
MINTY A., CHALON P.,
                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                               SCYA7 OR MCP3
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SIMILARITY: BELONGS T
C-C) (CHEMOKINE CC).
L; Z48480; G683719; -.
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BIND HEPARIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                FROM N.A.
94375065.
                                                                                                                                                                                                                                                                                          BIOPHYS.
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                                                                             RAJARATHNAM K., CL
395:277-282(1996).
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                                                                                                                                                                           NETW. 4:99-110(1993).
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                                                                                                                                                                                                                                                                                                   FROYEN
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                                                                                                      AND
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10903
                                                                                                                                                                                                                                                                                                                     AND
                                                                                                                                                                                                                                                                                                                                             CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           59
75
                                                                                                                                                                                                                                                                                          G., FITEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL; HEPARIN-BINDING;
3 BY SIMILARITY.
                                                                                                       SUBUNIT.
                                                                                                                                                                                                                                                                                                                     SEQUENCE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
TO THE INTERCRINE BETA FAMILY (SMALL CYTO)
                                                                                                                                                                                                                                                        SYN
                                                                                                                                 LENAERTS
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                                                                                      CLARK-LEWIS
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Pred. No.
0; Misma
                                                                                                                                                                                                                                                        G.,
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BY SIMILARITY.
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                                                                                                                                                                                                                                                                                           N P., PROOST P., V
191:535-542(1993)
                                                                                                                                                                                           .C., KAGHAD M., I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                         FROYEN
                                                                                                                                J.-P.,
                                                                                                                                                                                                                                                                                                                     31-67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Leus
. 6.15e+01;
.-hes 0;
         ATTRACTS MONOCYTES AUGMENTS MONOCYTE ! E OF GELATINASE B. 1
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                                           J.-C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CRC32;
                                                                                      Η.,
                                                                                                                                                                                                                                                        G.,
                                                                                                                                 OPDENAKKER
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                                                                                                                                                                                                                                                                                                                     AND
                                                                                                                                                                                                                                                                                                                                              TETRAPODA; MAMMALIA;
                                                                                       SYKES
                                                                                                                                                                                                                                                         VAN
                                           FERRARA P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                   VAN
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                                                                                                                                                                                           LIAUZUN P.,
A N., LUPKER
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         ANTI-TUMOR
THIS PROTE
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                                           DARBON
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   Query Match
Best Local S
Matches
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Best Local
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-!- SIMILARITY: BELLONGS TO THE INTERC C-C) (CHEMOKINE CC).

EMBL; X72308; G313708; ALT_INIT.
EMBL; X72309; -; NOT_ANNOTATED_CDS.
EMBL; X71087; G288399; -TAT_INIT.
EMBL; X71087; G288399; ALT_INIT.
EMBL; X71087; G288397; ALT_INIT.
EMBL; X71087; G288397; ALT_INIT.
EMBL; X71087; G288397; ALT_INIT.
PIR; JC1478; JC1478.
PIR; S32222; S32222.
PIR; S32222; S32222.
PIR; S32478; A54678.
                                                                                                                         DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P49113;
01-FEB-1996
01-FEB-1996
01-OCT-1996
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DISULFID
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CONFLICT
                                                                                                                                                                                                                                                                                                              YOSHIMURA T., JOHNSON D.G.;

J. IMMUNOL. 151:6225-6236(1993).

-I. FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,

-I. FUNCTION: TOTAL SISTEM NOT MONOCYTES. IT IS ALSO INVOLVED IN

RESOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN

NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN

RESPONSE TO AN INFLAMMATORY STIMULUS (BY SIMILARITY).

-I. SUBUNIT: HOMODIMER (BY SIMILARITY)

-I. SUBUNIT: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE EMBL); L04986; G459765; -

EMBL; L04986; G459765; -

PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHAIN
MOD_RES
                                                                                                                                                                                                                            CHAIN
                                                                                                                                                                                                                                                          SIGNAL
                                                                                                                                                                                                                                                                                       CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE-SPLEEN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAVIA PORCELLUS (GUINEA PIG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8) (NEUTROPHIL ATTRACTANT PROTEIN 1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IL8_CAVPO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          86.8%;
Local Similarity 100.0%;
es 5; Conservation
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                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94065176
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CHEMOTAXIS; HE
                                                                                                                                                       PS00471; SMALL_CYTOKINES_CXC; 1.
CHEMOTAXIS; INFLAMMATORY RESPONSE;
1 22 BY SIMILARITY.
23 101 INTERLEUKIN-8.
34 61 BY SIMILARITY.
36 77 BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99
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                                                                                                                             AA;
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                             86.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11200
                                                                                                                             11414 MW;
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; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    M.
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Score 46;
Pred. No.
0; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 46;
Pred. No.
0; Misma
                                                                                                                      INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
; E13FB521 CRC32;
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PYRROLIDONE CARBOXYLIC
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MISSING (IN REF. 4).
7502E19C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            K (IN REF.
                                DB 1; L
6.15e+01;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1; 1
6.15e+01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GLYCOPROTEIN;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                    SIGNAL
                                                       Length 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
Indels
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Gaps
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0;
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Best Local
                                                                                                                                                                  EL1_BOVIN
Q28153;
01-NOV-1997
01-NOV-1997
15-JUL-1998
                                                                                                                                                                                                                                                                                                                               DISULFID
DISULFID
CARBOHYD
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-NOV-1995
01-NOV-1995
15-JUL-1998
      GESTIN M., LE HUEROU LURON I., WICKER-PLANQUART CHAIX J.C., PUIGSERVER A., GUILLOTEAU P.; COMP. BIOCHEM. PHYSIOL. 118B.181-187(1997).
-!- CATALYTIC ACTIVITY: HYDROLYSIS OF PROTEINS, PREFERENTIAL CLEAVAGE: ALA-|-XAA.
-!- SIMILARITY: BELONGS TO PEPTIDASE FAMILY S1; TRYPSIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-UIL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
CHEMOATTRACTANT PROTEIN-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LT 21
MCP1_CAVPO
Q08782;
                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL
                                                                                                                  ELA1.
BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA;
EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
STRAIN=Z; TISSUE=SPLEEN;
MEDLINE; 93267104.
                                                                           STRAIN-HOLSTEIN-FRIESIAN; MEDLINE; 98079203.
                                                                                                SEQUENCE FROM N.A
                                                                                                                                                          ELASTASE
                                                                                                                                                                                                                                                                                                                                                                                 MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                          NEUTROPHILS.
-!- SUBUNIT: MONOMER OR
-!- SIMILARITY: BELONGS
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -!- FUNCTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAVIA PORCELLUS (GUINEA PIG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SCYA2 OR MCP1.
                                                                                                                                                                                                                                                                                                                                                                                           CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     YOSHIMURA T.
                                                                                                                                                                                                                                                             78 QKWVQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KKKWVQ
                                                                                                                                                                                                                                                   QKWVQ 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KOKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                       L04985; G349821;
TE; PS00472; SMAL
                                                                                                                                                                                                                                                                                                 h 86.8%;
Similarity 100.0%;
                                                                                                                                                        997 (REL. 35, CREATED)
997 (REL. 35, LAST SEQUENCE UF
998 (REL. 36, LAST ANNOTATION
1 PRECURSOR (EC 3.4.21.36).
                                                                                                                                                                                                                                                                                                                                                                                                             CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                              33
34
97
120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               150:5025-5032(1993).
N: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  86
                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                A,
                                                                                                                                                                                                           STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                        SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                               23
120
24
                                                                                                                                                                                                                                                                                                                                                                                                                                         cc).
                                                                                                                                                                                                                                                                                                                                           57
73
97
                                                                                                                                                                                                                                                                                                                                13741
                                                                                                                                                                                                                                                                                                                                                                                                              SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    HOMODIMER;
                                                                                     TISSUE-PANCREAS
                                                                                                                                                                                                                                                                                                                                MW.
                                                                                                                                                                                                                                                                                        Pred.
0; N
                                                                                                                                                                                                                                                                                                  Score 46; DB 1; 1
Pred. No. 6.15e+01
                                                                                                                                                                                                                                                                                                                                                                              KINES_CC; 1.
; INFLAMMATORY RESPONSE; GLYCC
BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN
PYRROLIDONE CARBOXYLIC ACID (
                                                                                                                                                                                                                                                                                                                                                  BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                        SIMILARITY)
                                                                                                                             VERTEBRATA; TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    MER; IN EQUI
                                                                                                                                                                                                                                                                                                                                22FAD257 CRC32;
                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                  ON UPDATE)
                                                                                                                                                                                                          266
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                                                                                                                                                                                                          A
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                                                                                                                                                                                                                                                                                        0
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                                                                 c.,
                 ALSO KNOWN AS
                                    INCLUDING
                                                                                                                                                                                                                                                                                        Indels
                                                                 Ε
                                                                                                                             MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIMILARITY).
(SMALL CYTOKINE
                                                                DREAN
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Best Local s
Matches
                                                                                                                                                                                 Query Match 86.8%;
Best Local Similarity 100.0%;
Matches 5; Conservative
                                                                                     01-NOV-1995
01-NOV-1995
01-NOV-1995
                                                                                                                                                                                                                                                                                                                             YBOF_SCHPO
P87156;
15-JUL-1998
15-JUL-1998
15-JUL-1998
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CHAIN
DISULFID
DISULFID
DISULFID
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                                                                                                                                                                                                               ACT_SITE
ACT_SITE
ACT_SITE
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HYDROLASE;
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE;
                                                      HAEMOPHILUS INFLUENZAE. PROKARYOTA; GRACILICUTES;
                                                                                                             YA54_HAEIN
P44104;
                                                                                                                                                                                                                                                                                                     15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UP
15-JUL-1998 (REL. 36, LAST ANNOTATION
HYPOTHETICAL 44.3 KD PROTEIN C25H2.15
SPBC25H2.15.
SCHIZOSACCHAROMYCES POMBE (FISSION YEA
STRAIN=RD / KW20;
MEDLINE; 95350630.
FLEISCHMANN R.D., ADAMS M.D.,
KERLAVAGE A.R., BULT C.J., TO!
                                                                               HYPOTHETICAL
                       SEQUENCE FROM
STRAIN-RD / KI
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                               PASTEURELLACEAE
                                                                                                                                                                                                                                                                       STRAIN-972;
                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                              EUKARYOTA; FUNGI; ASCOMYCOTINA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                  Match 86.8%;
Local Similarity 100.0%;
                                                                                                                                                            3 QKWVQ 7
                                                                                                                                                                                                                                                                                                                                                                                                           62 KQKWV 66
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                                                                                                                           24
                                                                                                                                                    QKWVQ
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PS00135;
                                                                                                                                                                                                                                                              LYE G.,
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266
                                                                             (REL. 32, CREATED)
(REL. 32, LAST SEQUENCE UPDATE)
(REL. 32, LAST ANNOTATION UPDATE)
L PROTEIN HI1054.
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17
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153
153
184
210
211
214
                                N.A.
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                                                                                                                     STANDARD;
                                                                                                                                                                                                                                                                                                                                                             STANDARD;
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26
26
266
72
220
220
240
71
119
119
214
87
241
28518
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TRYPSIN_SER;
PROTEASE; ZYM
                                                                                                                                                                                                                                                                                                                                                                                                                                                         MW;
                                                     SCOTOBACTERIA; FACULTATIVELY ANAEROBIC RODS;
                                                                                                                                                                                                                                                                                                       (FISSION YEAST)
 TOMB
                                                                                                                                                                                 Score 46; DB 1; I
Pred. No. 6.15e+01;
0; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ELASTASE 1.
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
CHARGE RELAY SYSTEM
CHARGE RELAY SYSTEM
                                                                                                                                                                                                                                                                                                                                                                                                                         Score 46; DB 1; 1
Pred. No. 6.15e+01
0; Mismatches (
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BY SIMILARITY.
ACTIVATION PEPTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                POTENTIAL.
POTENTIAL.
WHITE O.,
                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                             PRT;
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                                                                                                                                                                                                                                                                                              HEMIASCOMYCETES
                                                                                                                                                                                                                                                                                                                    UPDATE)
ON UPDATE)
15 IN CHROMOSOME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PANCREAS; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                            396
                                                                                                                    460
DOUGHERTY B.A., MERRICK J.
                                                                                                                                                                                                                 CRC32;
                                                                                                                                                                                                                                                              WOOD V., BARRELL
                                                                                                                   ₿
                                                                                                                                                                                                                                                                                                                                                            ₽
                                                                                                                                                                                                                                                DATA
                                                                                                                                                                                                Length 396;
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                                                                                                                                                                                  0
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(BY
(BY
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( SIMILARITY).
( SIMILARITY).
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IRESULT
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AC OCCUR
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Best Local s
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 86.8%;
Best Local Similarity 100.0%;
Matches 5; Conservative
                                                                                                                                  YCX2_YEAST STAN
P25649;
01-MAY-1992 (REL. 2
01-MAY-1992 (REL. 2
01-NOV-1995 (REL. 3
HYPOTHETICAL 15.1 F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Y549_METJA
Q57969;
Q1-NOV-1997
Q1-NOV-1997
Q1-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-JAL-1 / DSM 2661 / ATCC 43067;

MEDLINE; 96337999.

BULT C.J., WHITE O., OLSEN G.J., ZHOU L., FLEISCHMANN R.D.,

SUTTON G.G., BLAKE J.A., FITZGERALD L.M., CLAYTON R.A., GOCAYNE J.D.,

KERLAVAGE A.R., DOUGHERTY B.A., TOMB J.-F., ADAMS M.D., REICH C.I.,

OVERBEEK R., KIKKNESS E.F., WEINSTOCK F.G., MERRICK J.M., GLODEK A.,

SCOTT J.L., GEOCHAGEN N.S.M., WEIDMAN J.F., FUHRMANN J.L., NGUYEN D.,

UTTERBACK T.R., KELLEY J.M., PETERSON J.D., SADOW P.W., HANNA M.C.,

COTTON M.D., ROBERTS K.M., HURST M.A., KALNE B.P., BORODOVSKY M.,

KLENK H.-P., FRASER C.M., SMITH H.O., WOESE C.R., VENTER J.C.;

SCIENCE 273:1058-1073(1996).
                                                                   SACCHAROMYCES CEREVISIAE (BAKER'S YEAST).
EUKARYOTA; FUNGI; ASCOMYCOTINA; HEMIASCOMYCETES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MCKENNEY K., SUTTON G., FITZHUGH W., FIELDS C.A., GOCAYNE J.D., SCOTT J.D., SHIRLEY R., LIU L.-I., GLODEK A., KELLEY J.M., WEIDMAN J.F., PHILLIPS C.A., SPRIGGS T., HEDBLOM E., COTTON M.D., UTTERBACK T.R., HANNA M.C., NGUYEN D.T., SAUDEK D.M., BRANDON R.C., FINE L.D., FRITCHMAN J.L., FUHRMANN J.L., GEOGHAGEN N.S.M., FRIED C.L., MCDONALD L.A., SMALL K.V., FRASER C.M., SMITH H.O.,
                                                                                                                   HYPOTHETICAL YCR82W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; U67504; G1591254; TIGR; MJ0549; -. HYPOTHETICAL PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HYPOTHETICAL MJ0549.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; U32786; G15746: TIGR; HI1054; -. HYPOTHETICAL PROTEIN
                          SEQUENCE FROM N.A
  FELDMANN H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ARCHAEBACTERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  METHANOCOCCUS JANNASCHII.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SCIENCE
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                                                                                                                                                                                                                                                                                                                                                                                       45 KHKWIH 50
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 KQKWV 5
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                                                                                                                                                                                                                                                                                                                                                 KQKWVQ
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3; Conser
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    MANNHAUPT
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(REL. 35, LAST SEQUENCE UF
(REL. 35, LAST ANNOTATION
PROTEIN MJ0549.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                    22, CREATED)
22, LAST SEQUENCE UPDATE)
32, LAST SEQUENCE UPDATE)
32, LAST ANNOTATION UPDATE)
KD PROTEIN IN SRB8-TUP1 INTERGENIC
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    VETTER
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 46;
Pred. No.
0; Misma
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EB3D8804 CRC32;
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6.15e+01;
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8.82e+01;
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J. EAR.
[2]
SEQUENCE FROM N.A.
Thir.INE; 87224164.
                                                                                                                                                                                                                                                                                                                                                                                                                                 ILB_HUMAN STANDARD; PRT; >> AA.

P10145;

P10145;

01-MAR-1989 (REL. 10, CREATED)

01-MAR-1989 (REL. 36, LAST SEQUENCE UPDATE)

15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)

1NTERLEUKIN-8 PRECURSOR (IL-8) (MONOCYTE-DERIVED NEUTROPHIL CHEMOTACTIC FACTOR) (MDNOC) (T-CELL CHEMOTACTIC FACTOR) (NEUTROPHIL-ACTIVATING PROTEIN 1) (NAP-1) (LYMPHOCYTE-DERIVED NEUTROPHIL-ACTIVATING FACTOR) (LYMAP) (PROTEIN 3-10C) (NEUTROPHIL-ACTIVATING FACTOR)
                                                                                                            SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE; 88258376.
MATSUSHIMA K., MORISHITA K., YOSHIMURA T.,
LEW W., APPELLA E., KUNG H., LEONARD E.J.,
J. EXP. MED. 167:1883-1893(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL;
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PIR; S19497; S19497.
HYPOTHETICAL PROTEIN.
SEQUENCE 128 AA; 15117 MW; 283D25D0 CRC32;
                                                                                                                                                                                                                                                                                                                              EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                               HOMO SAPIENS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEULENBERG J.M., SELLINK E., RIEGMAN N.H., MOL. GENET. 232:284-294 (1992).
-i- FUNCTION: REQUIRED FOR COENTME PYRROLO-C BIOSYNTHESIS.
-i- SIMILARITY: TO OTHER BACTERIAL POQC.
EMBL, XS8778; G43907; -.
EMBL, XS8778; G43907; -.
EMBL, XS8778; G43907; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ENTEROBACTERIACEAE
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01-OCT-1996
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01-AUG-1992
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||||:
| KQKWV 5
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COENZYME PYRROLO-QUINOLINE-QUINONE (PQQ)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 44;
Pred. No.
2; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 44;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                             VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
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1.26e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.26e+02;
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                                                                                                                                                                                                                                                                                                                                                          TETRAPODA;
                                                                                                                                                            LAVU S., K
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                                                                                                                                                                                              KOBAYASHI Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        251;
                                                                                                                                                            J.J.;
                                                                                                                                                                                                                                                                                                                                                             MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
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SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE; 89313739.
KOWALSKI J., DENHARI
MOL. CELL. BIOL. 9:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE; 892.
GOLDS E.E., I
BIOCHEM. J.
                                                                         BALDWIN E.T., WEBER I.T., ST CHARLES R., XUAN YAMADA M., MATSUSHIMA K., EDWARDS B.F., CLORE PROC. NATL. ACAD. SCI. U.S.A. 88:502-506(1991)
                                                                                                                                                                                    MEDLINE; 90216714.
BALDWIN E.T., FRANKLIN K.A., APPELL MLODAWER A., WEBER I.T.;
J. BIOL. CHEM. 265:6851-6853(1990).
                                                                                                                                                                                                                                       MEDLINE; 90234679.
CLORE G.M., APPELLA E., YAMADA M., MATSUSHIMA K.,
BIOCHEMISTRY 29:1689-1696(1990).
                 MEDLINE; 91006326.

VAN DAMME J., RAMPART M., CONING R.,
WILLEMS J., BILLIAU A.;
EUR. J. IMMUNOL. 20:2113-2118(1990).
                                                                                                                                                                                                                                                                                               YOSHIMURA T., MATSUSHIMA K., OPPENHEIM J.J., LEONARD E.J. PROC. NATL. ACAD. SCI. U.S.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 23-54.
MEDLINE; 89279141.
SUZUKI K., MIYASAKA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDLINE, 89309826.
MUKAIDA N., SHIROO M., MATSUSHIMA
J. IMMUNOL. 143:1366-1371(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SCHMID J., WEISSMANN C.;
J. IMMUNOL. 139:250-256(1987).
N-TERMINAL FORMS
                                                                                                         MEDLINE;
                                                                                                                                               MEDLINE; 91
CLORE G.M.,
                                                                                                                                                                                                                                                                                                                                                                             MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                         GREGORY H., YOUNG BIOCHEM. BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 28-99
MEDLINE; 88162914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MIZUNO S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE OF 23-46.
MEDLINE; 89246368.
                                                         N-TERMINAL FORMS.
                                                                                                                 X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS),
                                                                                                                                                                   X-RAY CRYSTALLOGRAPHY,
                                                                                                                                                                                                                            X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS).
                                                                                                                                                                                                                                                                                                                            SEQUENCE OF 28-69.
MEDLINE; 88097462.
                                                                                                                                                                                                                                                                                                                                                           BIOCHEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUBMITTED (JAN-1993)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                  DLINE; 90234679
                                                                                                                                     MOL.
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                                                                                                                                       BIOL.
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                                                                                                                                                                                                                                                                                                                                                                   PEVERI P.,
                                                                                                                                                          91171286
                                                                                                                                     GRONENBORN A.M.;
L. 217:611-620(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MASON P., NYIRKOS
259:585-588(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                        169:1895-1901(1989).
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[OL. 9:1946-1957(1989).
                                                                                                                                                                                                                                                                                                                                                                                                         J.,
                                                                                                                                                                                                                                                                                                SCI. U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OT
                                                                                                                                                                                                                                                                                                                                                                                                         SCHROEDER J.M., MROWIETZ U., COMMUN. 151:883-890(1988).
                                                                                                                                                                   AND
                                                                                                                                                                                                                                                                                                                                                           COMMUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTA H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL/GENBANK/DDBJ DATA BANKS
                                    CONING R.,
                                                                                                                                                                   STRUCTURE
                                                                                                                                                                                                         APPELLA
                                                                                                                                                                                                                                                                                                                   TANAKA S.,
                                                                                                                                                                                                                                                                                                84:9233-9237(1987).
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                                                                                                                                                                                                                                                                                                                                                         ., BAGGIOLINI M.;
149:755-761(1987).
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H
                                                                                                                                                                   ВУ
                                     DECOCK
                                                                                                                   AND
                                                                                                                                                                    NMR.
                                                                                                                                                                                                                                                                                                                    ROBINSON
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                                                                                                                                                                                                         YAMADA
                                                                                                                   STRUCTURE
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                                                                                   J.C.,
                                     VAN
                                                                                                                                                                                                         М.,
                                                                                                                                                                                                                                                                                                                    E.A.,
                                                                                                                                                                                                                                                         GRONENBORN
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                                    OSSELAER N.,
                                                                                    APPELLA E., GRONENBORN A.M.;
                                                                                                                                                                                                         MATSUSHIMA
                                                                                                                   BY NMR
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Best Local S
Matches
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EMBL; Y00787; G34519; -.

EMBL; M17017; G179580; -.

EMBL; M26383; G188628; -.

EMBL; M28130; G186368; -.

EMBL; D14283; G219916; -.

PIR; A37034; A37034.

PIR; S03975; S03975.

PIR; S03975; S04216.
SAA3_MOUSE S
P04918; Q62201;
P04918; Q62201;
13-AUG-1987 (REL
13-AUG-1987 (REL
01-NOV-1997 (REL
                                                                                                                                                                                                                                                       DISULFID
DISULFID
CONFLICT
                                                                                                                                                                                                                                                                                                              CYTOKINE;
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE: 92347562.

MEDLINE: 92347562.

BAGGIOLINI M., CLARK-LEWIS I.;

FEBS LETT. 307:97-101(1992).

-I- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,

BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN

NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN

RESPONSE TO AN INFLANMATORY STIMULUS.

-I- SUBUNIT: HOMODIMER.

-I- SUBUNIT: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE).
                                                                                                                                                                         STRAND
TURN
                                                                                                                                                                                                  HELIX
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                                                                                                                                                                 HELIX
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                                                                                                                                                                                                                                                                                                      CHAIN
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CLARK-LEWIS I., MOSE B.,
AEBERSOLD R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE; 89231715.
VAN DAMME J., VAN BEEUMEN J., CONINGS R.,
EUR. J. BIOCHEM. 181:337-344(1989).
[17]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BIOCHEMISTRY 30:3128-3135(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SYNTHESIS OF 28-99.
                                                                                                                                                                                                                                                                                             PROPEP
                                                                                                                                                                                                                                                                                                                                  PROSITE;
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                                                                                                                   Local Similarity
                                                                                         81 KENWVQ 86
                                                                         \vdash
                                                                                                                                                                                                                                                                                                                                                                  3; 1IL8; 15-JAN-91.
3; 2IL8; 15-JAN-91.
3; 3IL8; 15-OCT-92.
3; 1ICW; 12-MAR-97.
                                              29
                                                                         KQKWVQ 6
                                                                                                                                                                                                                                                                                                                      PS00471; SMALL_CYTOKINES_CXC; 1. CHEMOTAXIS; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                  15-OCT-95
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(REL. 05, CREATED)
(REL. 05, LAST SEQUENCE UPDATE)
(REL. 35, LAST ANNOTATION UPDATE)
                                                                                                            Conservative
                                    STANDARD;
                                                                                                                  81.1%;
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                                                                                                         Score 43; DB 1; I
Pred. No. 1.78e+02;
2; Mismatches 0
                                                                                                                                                                                                                                                                                  INTERLEUKIN-8.
ONE OR MORE OF 'IN SOME MATURE
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                                                                                                                                             89D1891F CRC32;
                                    PRT;
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                                                                                                                                                                                                                                                       L (IN REF.
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                                    122
                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DECOCK
                                                                                                                                                                                                                                                                                   THESE
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                                                                                                                                                                                                                                                                                                                      SIGNAL;
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OF IL-8.
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Best Local Similarity
Matches 4; Conser
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MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; C
EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHAIN
CONFLICT
SEQUENCE
                                                                                                         PFLA_ECOLI STANDARD; PRT; 245 AA. P09374; 01-MAR-1989 (REL. 10, CREATED) 01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE) 01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE) PYRUVATE FORMATE-LYASE 1 ACTIVATING ENZYME (E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -!- INDUCTION: UPON CYTOKINE STIMULATION.
-!- DISEASE: REACTIVE, SECONDARY AMTIGIOSSIS IS CHARACTERIZED BY THE EXTRACELLULAR ACCUMULATION IN WAILOUSS TISSUES OF THE SAA PROTEIN.
THESE DEPOSITS ARE HIGHLY INSOLUBLE AND RESISTANT TO PROTEOLYSIS;
-!- SIMILARIY: BELONGS TO THE SAA FAMILY.
-!- SIMILARIY: GA17998; --
EMBL; X03505; G762988; JOINED.
EMBL; X03506; G762988; JOINED.
EMBL; M17792; G200911; --
EMBL; M25521; A23521.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 32-122 FROM N.A.
MEDLINE; 87309776.
YAMAMOTO K.I., GOTO N., KOSAKA J., SHIROO M., YEUL Y.D.,
J. IMMUNOL. 139:1683-1688(1987).
-!- FUNCTION: MAJOR ACUTE PHASE REACTANT. APOLIPOPROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN-BALB/C; TISSUE-LIVER;
MEDLINE; 82229376.
STEARMAN R.S., LOWELL C.A., PEARSON W.R.,
ANN. N.Y. ACAD. SCI. 389:106-115(1982).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. MEDLINE; 86120372.
                                              PROKARYOTA; GRACILICUTES;
                                                                                            PFLA OR ACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN-SWISS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STEARMAN R.S., LOWI
NUCLEIC ACIDS RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SERUM AMYLOID A-3 PROTEIN PRECURSOR
                          ENTEROBACTERIACEAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOWELL C.A.,
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                                                                                                                                                                                                                                                                                                                                                                            19 QRWVQ
                                                                                                                                                                                                                                                                                                                             2 QKWVQ
                                                                                                                                                                                                                                                           30
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[TE; PS00992; SAA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C23843;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PHASE;
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57
122
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1 19
20 122
57 57
122 AA; 13773 I
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                                                                                                                                                                                                                                                                                                                                                                                                                                                80.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81.1%;
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                                              SCOTOBACTERIA; FACULTATIVELY ANAEROBIC RODS;
                                                                                                                                                                                                                                                                                                                                                                                                                        Score 43;
Pred. No.
1; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SERUM AMYLOID A-3 PROTEIN.
R -> G (IN REF. 4).
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                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                43; DB 1; 1
No. 1.78e+02;
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                                                                                                                  )E
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Search completed: Thu Apr 1 07:31:17 1999 Job time: 10 secs.
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RC STRAIN=K12;

RX MEDLINE; 97061202.

RX MEDLINE; 97061202.

RA CSHIMA T., ALBA H., BABA T., FUJITA K., HAYASHI K., HONJO A.,

RA KROMTO K., INADA T., ITOH T., KAJIHARA M., KANAI K.,

RA KASHIMOTO K., KIMURA S., MORI H., MOTOMURA K., MAKINO K., MASUDA S.,

RA KASHIMOTO K., KIMURA S., MORI H., MOTOMURA K., MAKAMURA Y.,

RA MIKI T., MIZOBUCHI K., MORI H., MOTOMURA K., MAKAMURA Y.,

RA NASHIMOTO H., NISHIO Y., SAITO N., SAMPEI G., SEKI Y., TAGAMI H.,

RA NASHIMOTO K., WADA C., YANAMOTO Y., YANO M., HORIUCHI T.;

RA TAKEMOTO K., WADA C., YANAMOTO Y., YANO M., HORIUCHI T.;

RA TAKEMOTO K., WADA C., YANAMOTO Y., YANO M., HORIUCHI T.;

RA TAKES, 3:137-155(1996).

CC CONDITIONS BY GENERATION OF PYRUVATE FORMATE-LYASE 1 UNDER ANAEROBIC

CC SADENOSYLMETHONINE AND REDUCED FLAVODOXIN AS COSUBSTRATES TO

CC FORDICE S'-DEOXY-ADENOSINE.

CC PRODUCE S'-DEOXY-ADENOSINE.

CC 
                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 4; Conser
                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
STRAID*K12 / MG1655;
BLATTINER F.R., PLUNKETT G. III, MAYHEW G.F., PERNA N.T., GLASNER F.D.;
SUBMITTED (JAN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
[3]
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STRALN=K12;
MEDLINE; 89030680.
ROEDEL W., PLAGA W., FRANK R., KNAPPE J.;
EUR. J. BIOCHEM. 177:153-158(1988).
[2]
                                                                                                                          206 KHKWV 210
                                                                                              1 KOKWV 5
                                                                                                                                                                                        81.1%;
llarity 80.0%;
Conservative
                                                                                                                                                                                     Score 43; DB 1; Length 245; Pred. No. 1.78e+02; 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                    IRON (POTENTIAL).
IRON (POTENTIAL).
IRON (POTENTIAL).
W; 3D9FD679 CRC32;
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1 50 94.3 192 10 023536 RESISTANCE GENE HOMOLO 2.75e+01 2 50 94.3 1361 10 004264 DOWNY MILDEW RESISTANC 2.75e+01 3 49 92.5 324 4 Q15630 TRANSCRIPTION FRACTOR. 4.06e+01 4 49 92.5 359 4 060759 CYPCHESIN BINDING PROT 4.06e+01 6 49 92.5 395 11 035188 NEUROTACTIN. 7 48 90.6 454 4 060383 GDF-9. 7 48 90.6 454 4 060383 GDF-9. 8 47 88.7 145 2 P74671 HYPOTHETICAL 16.6 KD P 8.70e+01 9 47 88.7 579 11 Q60736 ZOWA PELLUCIDA 3 RECEP 8.70e+01 11 46 86.8 172 2 057411 LYMPHOTACTIN PRECURSOR 1.26e+02 12 46 86.8 187 2 083516 HYPOTHETICAL 21.4 KD P 1.26e+02 13 46 86.8 289 2 067646 HYPOTHETICAL 21.4 KD P 1.26e+02 14 86.8 334 1 057833 JALA LONG HYPOTHETICAL 1.26e+02 15 46 86.8 403 5 076961 CALRETICULIN PRECURSOR 1.26e+02 16 86.8 2273 4 078363 ATP-BINDING CASSETTE T 1.26e+02 17 46 86.8 2273 4 050438 RIM ABC TRANSPORTER. 1.26e+02 18 46 86.8 2273 4 060438 RIM ABC TRANSPORTER. 1.26e+02 19 46 86.8 2273 4 060438 RIM ABC TRANSPORTER. 1.26e+02 1.26e+02 1.26e+02 1.26e+02 1.26e+02 1.26e+02 1.26e+03 1.2	Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.  SUMMARIES  Result Query No. Score Match Length DB ID Description Pred. No.	Database: sptremb18 1:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human 5:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle 9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified 13:sp_vertebrate 14:sp_virus  Statistics: Mean 22.471; Variance 34.448; scale 0.652	Title: >US-08-927-939-9 Description: (1-6) from USO8927939.pep Perfect Score: 53 Sequence: 1 KQKWVQ 6  **This is a sequence of the sequence of	Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd  MPsrch_pp protein - protein database search, using Smith-Waterman algorithm Run on: Thu Apr 1 07:31:34 1999; MasPar time 4.54 Seconds 72.887 Million cell updates/sec Tabular output not generated.	**************************************
74 43 81.1 1705 10 023363 HY   75 43 81.1 2055 11 088938 RH   76 43 81.1 2055 11 088938 RH   77 43 81.1 2055 11 088938 RH   78 43 81.1 32467 10 023535 RE   79 43 81.1 3396 5 062569 HY   79 43 81.1 3396 5 061020 GU   81 42 79.2 165 11 061589 GU   82 79.2 191 5 061287 CS   83 42 79.2 264 2 056778 RE   84 42 79.2 266 5 023888 RH   85 42 79.2 328 2 051238 PH   86 42 79.2 375 5 018678 GU   87 42 79.2 395 1 05578 GU   88 42 79.2 395 1 018678 GU   89 42 79.2 396 1 05578 GU   89 42 79.2 419 4 014455 ALT   90 42 79.2 644 5 017942 C1   91 42 79.2 693 10 064561 SA   93 42 79.2 693 10 064561 SA   93 42 79.2 722 10 023337 HY	43 81.1 603 4 075135 43 81.1 766 10 023538 43 81.1 835 5 022469 43 81.1 836 9 048483 43 81.1 1255 2 086167 43 81.1 1256 10 023528 43 81.1 1266 4 024578 43 81.1 1422 10 023533 43 81.1 1422 10 023533 43 81.1 1641 11 088528	43 81.1 415 5 Q18565 43 81.1 471 10 Q49326 43 81.1 477 10 Q39330 43 81.1 489 2 Q51652 43 81.1 496 5 Q93339 43 81.1 596 5 Q18452 43 81.1 596 10 Q08610 43 81.1 598 10 Q08610	44 83.0 770 5 060999 44 83.0 990 4 015206 44 83.0 1218 4 005331 44 83.0 2685 3 014151 43 81.1 100 12 034570 43 81.1 215 5 018293 43 81.1 237 10 049637 43 81.1 317 2 066883 43 81.1 317 2 086548 43 81.1 319 7 031172 43 81.1 369 7 031172 43 81.1 389 1 058409 43 81.1 395 2 054095	44 83.0 171 4 Q03837 44 83.0 200 4 Q03837 44 83.0 341 0 Q3578 44 83.0 383 10 Q23578 44 83.0 419 13 Q98984 44 83.0 465 4 Q03838 44 83.0 465 4 Q03838 44 83.0 465 4 Q03838 44 83.0 465 9 Q056182 44 83.0 500 3 Q06682 44 83.0 501 2 Q55755 44 83.0 591 4 Q01720	46 86.8 2273 4 060915 45 84.9 119 4 000175 45 84.9 178 2 031562 45 84.9 383 5 017645 45 84.9 475 4 050646 45 84.9 593 5 062146 45 84.9 1038 10 023532 45 84.9 1038 10 023532 46 83.0 161 8 003005 44 83.0 167 10 049197
			COLA.  COLA.  COLA.  PROFILAGGRIN (FRAGMENT 2.62e+02 FILAGGRIN (PROFILAGGRI 2.62e+02 FILAGGRIN (PROFILAGGRI 2.62e+02 FYDOTHETICAL 310.3 KD 2.62e+02 ENVELOPE GLYCOPROTEIN 3.74e+02 PAR CHROMOSOME 4, ESSA 3.74e+02 PHYPOTHETICAL 26.2 KD 9.3.74e+02 HYPOTHETICAL 26.2 KD 9.3.74e+02 HYPOTHETICAL 25.2 KD 9.3.74e+02 HYPOTHETICAL 25.3 KD 9.3.74e+02 HYPOTHETICAL 26.3 KD 9.3.74e+02 HYPOTHETICAL 26.3 KD 9.3.74e+02 HYPOTHETICAL 26.3 KD 9.3.74e+02 HYPOTHETICAL 26.3 KD 9.3.74e+02 HYPOTHETICAL 3.74e+02 MHC CLASS I ANTIGEN 3.74e+02 90TATIVE OXIDASE 3.74e+02 PUTATIVE OXIDASE 3.74e+02	2.62e+0 2.62e+0 2.62e+0 2.62e+0 2.62e+0 2.62e+0 2.62e+0 2.62e+0 2.62e+0 2.62e+0	ABCR.  ABCR.  MPIF-2.  MPIF-2.  MPIF-2.  MPIF-2.  MPIF-2.  1.83e+02  1.83e+0

94 95 97 97 98 99

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Query Match
Best Local S
Matches
                                   Query Match
Best Local S
Matches
                                                                                                                       SEQUENCE FROM N.A.

STRAIN-LANDSBERG BRECTA;

STRAIN-LANDSBERG BRECTA;

PARKER J.E., COLEMAN M.J., S

DER BIEZEN E.A., MOORES T.,

PLANT CELL 0:0-0(0),

EMBL; U97106; G2109275; -.

PFAM; PF00560; LRR; 8.

PFAM; PF00931; NB-ARC; 1.

SEQUENCE 1361 AA; 154366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
BEVAN M., STIEKEMA W., MURPHY G., WAMBUTT R., POHL T., TERR KREIS M., KAVANAGH T., ENTIAN K.D., RIEGER M., JAMES R., PUIGDOMENECH P., HATZOPOULOS P., OBERMAIER B., DUESTERHOFT JONES J., PALME K., ANSORGE W., DELSENY M., BANCROFT I., ME SCHUELLER C., CHALWATZIS N.;
SCHUELLER C., CHALWATZIS N.;
SCHMITTED (JUL-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JAN-1998 (TREMBLREL. 05, CREATED)
01-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UPDATE)
01-JAN-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL. 07, LAST SACUENCE
RESISTANCE GENE HOMOLOG.
RESISTANCE GENE HOMOLOG.
RARBIDOPSIS THALIANA (MOUSE-EAR CRESS).
RARBIDOPSIS THALIANA (MOUSE-EAR CRESS).
RESISTANCE GENE HOMOLOG.
RARBIDOPSIS THALIANA (MOUSE-EAR CRESS).
RARBIDOPSIS GENERATOPHYTA; MAGNOLIOPHYTA;
REUDICOTYLEDONS; ROSIDAE; CAPPARALES; BRASSICACEAE; ARABIDOPSIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       004264;
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023536;
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EUKARYOTA; VIRIDIPLANTAE; CHAROPHYTA/EMBRYOPHYTA, GROUP; EMBRYOPHYTA;
TRACHEOPHYTA; EUPYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA;
TRACHEOPHYTA; CONTRACTOR (CAPPARALES; BRASSICACEAE; ARABIDOPSIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUL-1997 (TREMBLREL.
01-JUL-1997 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
DOWNY MILDEW RESISTANCE
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||:|||
1 KQKWVQ 6
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                                                          Local Similarity
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larity 83.3%;
Conservative
                                   Conservative
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1253
1638
2182
2488
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04, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE
PROTEIN RPP5.
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Q63803
O84834
Q19523
O61529
Q26034
O61528
                              Score
Pred.
1; N
                                                                                                                                 MW:
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Pred. No.
1; Misma
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                                                                                                                                 022C612B CRC32;
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                                                                                                                                                                                                                                                      FROST L.
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2.75e+01;
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                                                          DB 10;
2.75e+01;
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F17C8.1.
GUANINE NUCLEOTIDE EXC
VARIANT-SPECIFIC SURFA
GUANINE NUCLEOTIDE EXC
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                                                                              Length 1361;
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                                 Indels
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  RESULT CO. AC. CO. AC.
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                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 92.5%;
Best Local Similarity 83.3%;
Matches 5; Conservative
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Best Local
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O35188 PRELIMINARY; PRT; 395 AA.
O35188;
O1-JAN-1998 (TREMBLREL. 05, CREATED)
O1-JAN-1998 (TREMBLREL. 05, LAST SEQUENCE UP
O1-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION
NEUROTACTIN.
SCYD1.
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MA
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JULT 3
Q15630 PRELIMINARY; P:
Q15630;
Q15630;
Q1-NOV-1996 (TREMBLREL 01, CRE:
Q1-NOV-1996 (TREMBLREL 08, LAS:
Q1-NOV-1998 (TREMBLREL 08, LAS:
TRANSCRIPTION FACTOR.
HOMO SAPIENS (HUMAN)
EUKARYOTA; METAZOA; CHORDATA; V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    060759 PRELIMINARY; PI
060759; OT-AUG-1998 (TREMBLREL: 07, CRE)
01-AUG-1998 (TREMBLREL: 07, LASS)
01-AUG-1998 (TREMBLREL: 07, LASS)
01-AUG-1998 (TREMBLREL: 07, LASS)
CYTOHESIN BINDING PROTEIN HE.
HOMO SAPIENS (HUMAN)
EUKARYOTA; METAZOA; CHORDATA; VI
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                leucine zipper containing protein.";
BIOCHIM. BIOPHYS. ACTA 1216:321-324(1993).
EMBL; L10633; G431328; -
PFAM; PF00595; PDZ; 1.
SEQUENCE 324 AA; 36318 MW; 5F2344EC CR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HEUFLER C.;
SUBMITTED (MAY-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF068836; G3192909; -.
SEQUENCE 359 AA; 40009 MW; 19DB9FC9 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE: 94060111.
DIXON B., SAHELY B., LIU L., POHAJDAK B.;
"Cloning a cDNA from human NK/T cells which."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATARRHINI;
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                                                                                                                                                                                                                                                                                                                                                                              186
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EQUENCE FROM N.A.
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nes 5; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        _
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                                                                                                                                                                                                                                                                                                                              KQKWVQ
                                                                                                                                                                                                                                                                                                                                                                         KOKWVE 191
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, LAST SEQUENCE UP
, LAST ANNOTATION
                                                                                                                                                                                                                                                                                                                                                                                                                         Score 49; DB 4;
Pred. No. 4.06e+
1; Mismatches
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LAST SEQUENCE UPDATE)
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                                                                                                                            CREATED)
LAST SEQUENCE UI
LAST ANNOTATION
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Pred. No. 4.06e+01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERTEBRATA; MAMMALIA;
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                            MAMMALIA;
                                                                                                                            UPDATE)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 359;
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                              EUTHERIA;
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Best Local 9
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Best Local
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060383;
01-AUG-1998
01-AUG-1998
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SEQUENCE FROM N.A.
MEDLINE; 97320499.
PAN Y., CLARE L., HONG Z., DOLICH S., D
GOSSELIN M., MA J., DUSSAULT B., WOOLF
GUTIERREZ-RAMOS J.C., GEARING D.;
GUTIERREZ-RAMOS J.C., GEARING D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FRACTALKINE.

MUS MUSCULUS (MOUSE).

EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;

EUKARYOTA; MIRTDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JAN-1998
01-JAN-1998
01-NOV-1998
                                                                                                        SEQUENCE FROM N.A.
KIMMERLY W., BONDOC M., CHENG J.,
DAVIS C.A., KADNER K., MIGUEL T.,
SUBRAMANIAN S., MARTIN C.H.;
SUBMITTED (MAR-1998) TO EMBL/GENB!
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                035933;
                                                                                                                                                                                                                                                                                            HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS EMBL: U92565; G2459677; -. PFAM: PF00048; il8; 1.
   SEQUENCE FROM N.A. RICKE D.O.;
SUBMITTED (APR-199
                                                                                                                                                                                                                                                                                                                                                                                                                       GDF-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ROSSI D., HARDIMAN G.,
ZLOTNIK A., BAZAN J.F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
STRAIN-BALB/C; TISSUE-BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NATURE 387:611-617(1997).
EMBL; AF010586; G2317698;
MGD; MGI:1097153; SCYD1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                78 KEKWVQ
|:||||
| KQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       78 KEKWVQ
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NCE 395 AA;
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Similarity 83.3%;
5; Conservative
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   (APR-1998)
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G (TREMBLREL.
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larity 83.3%;
Conservative
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07, LAST SEQUENCE UPDATE)
07, LAST ANNOTATION UPDATE)
EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                 EMBL/GENBANK/DDBJ DATA
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Pred. No. 4.06e+01;
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                                                                                                                                                                     CONNOLLY K.S., GUNNING PITLUCK S., POLLARD M.,
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4.06e+01;
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                                                                                                                 BANKS
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Best Local
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                                                                                                                                                                                                            Q60736 PRELIMINARY; PRT; 579 AA. Q60736; O1-NOV-1996 (TREMBLREL. 01, CREATED) O1-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UP O1-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION ZONA PELLUCIDA 3 RECEPTOR PRECURSOR (SPERM FERTILIZATION PROTEIN SP56).
                                              STRAIN-HSD/ICR; TI
MEDLINE; 95327956
                                                                                                                                                                ZP3R OR SP56.
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-FEB-1997 (TREMBLREL 02, CREATED)
01-FEB-1997 (TREMBLREL 02, LAST SEQUENCE UP
01-NOV-1998 (TREMBLEEL 08, LAST ANNOTATION
HYPOTHETICAL 16.6 KD PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P74671
P74671;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -1- SIMILARITY: TO OTHER GROWTH FACTORS OF THE TGF-BETA FAMILY. EMBL; AC004500; G2996640; -. PROSITE; PE00250; TGF_BETA; 1. GLYCOPROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA RES. 3:109-136(1996).
EMBL; D90917; D1019522; -.
HYPOTHETICAL PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Sequence analysis of the genome of the unicellular cyanobacterium Synechocystis sp. strain PCC6803. II. Sequence determination of the entire genome and assignment of potential protein-coding regions.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KANEKO T., SATO S., KOTANI H., TANAKA A., ASAMIZU E., NAKAMURA Y., MIYAJIMA N., HIROSAWA M., SUGIURA M., SASAMOTO S., KIMURA T., HOSOUCHI T., MATSUNO A., MURAKI A., NAKAZAKI N., NARUO K., OKUMURA SHIMPO S., TAKEUCHI C., WADA T., WATANABE A., YAMADA M., YASUDA M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SYNECHOCYSTIS SP. (STRAIN PCC 6803).
BACTERIA; CYANOBACTERIA; CHROOCOCCALES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. STRAIN-PCC6803;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN-PCC6803; TABATA S.;
                             BOOKBINDER L.H.,
                                                                                                  SEQUENCE
                                                                                                                                            SCIUROGNATHI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBMITTED (JUN-1996)
  Tissue-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TABATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 97061201.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        208 KHKWIQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ۳
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 KQKWVQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KOKWVO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
and species-specific expression of sp56,
                                                                                                FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       145 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   454 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             66
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                            MURIDAE;
                                                                    TISSUE-TESTIS:
                        CHENG A., BLEIL J.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16561 MW;
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                                                                                                                                            MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 48; Di
Pred. No. 5.9
2; Mismatch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 47; DB 2;
Pred. No. 8.70e+01
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   F410BD9F CRC32;
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                                                                                                                                            MUS.
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5.96e+01
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                                                                                                                                                                  MAMMALIA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 145;
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    mouse
                                                                                                                                                                  EUTHERIA; RODENTIA;
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Best Local S
Matches
     Query Match
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ULT 11
Q51136; PRELIMINARY;
Q51136; CTREMBLREL. 01, C
01-NOV-1996 (TREMBLREL. 01, L
01-NOV-1998 (TREMBLREL. 08, L
HI1054 HOMOLOG (FRACMENT).
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01-JUN-1998 (TREMBLREL. 06
01-JUN-1998 (TREMBLELE. 06
1-JUN-1998 (TREMBLELE. 06
LYMPHOTACTIN PRECURSOR.
GALLUS GALLUS (CHICKEN).
EUKARYOTA; METAZOA; CHORDA
NEOGNATHAE; GALLIFORMES; P
                                                                      EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      057411
057411;
01-JUN-1998
01-JUN-1998
01-JUN-1998
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SIGNAL
                                                                                                                                                                                              ERWIN A.L., GOTSCHLICH E.C.; "Cloning of a Neisseria meningitidis gene (L-LDH): evidence for a second meningococc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ROSSI D.L., BAZAN J.F.,
SUBMITTED (JUN-1997) TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SCIENCE 269.86-88(1995).

SCIENCE 269.86-88(1995).

EMBL; U17108; G897563; -.

MGD; MGI:104965; ZP3R.

PFAM; PF00084; sushi; 7.
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SCIENCE 269:86-88
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL;
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                                                                                                                                                                                                                                                                                         MEDLINE; 96326323
                                                                                                                                                                                                                                                                                                                       STRAIN-M1080;
                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                         BACTERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE=SPLEEN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                   NEISSERIA MENINGITIDIS
                                                                                                                                                                       regulation.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Match 86.8%;
Local Similarity 100.0%;
les 5; Conservative
                                                                                                                                            BACTERIOL. 178:4807-4813(1996).
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                                                                                                                  U58911; G1381738;
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579 /
                                                                                                                                                                                                                                                                                                                                                                                                      PROTEOBACTERIA;
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7 AA;
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                                                             ΑĄ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              32
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64950 Þ
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97
11131
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EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ¥;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DATA; VERTEBRATA; ARCHOSAURIA; AVES; PHASIANIDAE; PHASIANINAE; GALLUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ₩;
                                                             MW;
                                                                                                                                                                                                                                                                                                                                                                                                      BETA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 46; DB 13;
Pred. No. 1.26e+02;
0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Pred. No. 8.
     Score 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        POTENTIAL.
LYMPHOTACTIN.
3290101C CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                          85C8B90D CRC32;
                                                                                                                                                                                                 meningococcal L-LDH with
                                                                                                                                                                                                                                                                                                                                                                                                   SUBDIVISION; NEISSERIACEAE; NEISSERIA.
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8.70e+01;
  DB 2;
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Length 172;
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RESULTATION OF THE PROPERTY OF
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Best Local Similarity 100.0%;
Matches 5; Conservative
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Matches 5; Conservative
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083516;
01-NOV-1998
01-NOV-1998
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01-AUG-1998
01-AUG-1998
01-NOV-1998
          MEDLINE; 98196666.

DECKERT G., WARREN P.V., GAASTERLAND T., YOUNG W.G., LENOX A.L., GRAHAM D.E., OVERBEEK R., SNEAD M.A., KELLER M., AUJAY M., HUBER GRAHAM D.E., SHERT J.M., OLSON G.J., SWANSON R.V.; FELDMAN R.A., SHORT J.M., OLSON G.J., SWANSON R.V.;
                                                                                                                                                                                                                                                                                                                                                                                                                    LT 13
067646
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DODSON R., GWINN M., HICKEY E.K., CLAYTON R., KEYCHUM K.A.,
DODSON R., GWINN M., MCLEOD M.P., SALZBERG S., PETERSON J.,
SODERGREN E., HARDHAM J.M., MCLEOD M.P., SALZBERG S., PETERSON J.,
KHALAK H., RICHARDSON D., HOWELL J.K., CHIDAMBARAM M., UTTERBACK T.,
MCDONALD L., ARTIACH P., BOWMAN C., COTTON M.D., FUJII C., GARLAND S
HATCH B., HORST K., ROBERTS K., WATTHEY L., WEIDMAN J., SMITH H.O.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBMITTED (MAR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AEOO1226; G3322795; -.
HYPOTHETICAL PROTEIN.
SEQUENCE 187 AA; 21410 MW; 50303E26 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WENTER J.C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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SCIENCE 281
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MEDLINE; 98332770
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                                                                                                                                                 STRAIN-VF5
                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                       BACTERIA;
                                                                                                                                                                                                                                              AQUIFEX AEOLICUS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VENTER J.C.
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|||||
1 KQKWV
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8 (TREMBLREL: 08, LA
8 (TREMBLREL: 08, LA
AL 21.4 KD PROTEIN:
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BETA
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LAST ANNOTATION UPDAT
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LAST SEQUENCE UPDATE)
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SUBUNIT.
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Pred. No. 1.26e+02;
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HUBER
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Best Local
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Best Local
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057833;
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EMBL; AEO00755; G2984068; -.
AMINOACYL-TRNA SYNTHETASE.
AMINOACYL-TRNA SYNTHETASE.
"Calreticulin is a hookworm allergen.";
SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ
EMBL; AJ006790; E1300555;
PROSITE: PS00803; CALRETICULIN_1; 1.
PROSITE: PS00804; CALRETICULIN_2; 1.
                                                                                                         NECATOR AMERICANUS.
EUKARYOTA; METAZOA; NEMATODA; SECERNENTEA; RHABDITIA; STROI
EUKARYOTA; METAZOA; NECATORATIDAE; BUNOSTOMINAE; NECATOR
                                                                                                                                                                        01-NOV-1998 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
                                                                                                                                                                                                                          076961
                                                                                                                                                                                                                                                                                                                                                                          SUBMITTED (DEC-1997) TO EMBL/GENBANK/DDBJ DATA BANKS EMBL; AB009467; D1027216; -. SEQUENCE 334 AA; 36602 MW; 6F4BA2E5 CRC32;
                                                             SEQUENCE FROM N.A.
PRITCHARD D.I., BROWN A., MCEI
BERRY C., FULLKRUG R., BECK E.
                                                                                                                                                             CALRETICULIN
                                                                                                                                                                                                                076961;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
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01-AUG-1998 (TREMBLREL.
01-AUG-1998 (TREMBLREL.
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                                                                                                                                                                                                                                                                                                   290 KEKWVH 295
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Local Similarity 100.0%;
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                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                      86.8%;
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07, LAST SEQUENCE UPDATE)
07, LAST ANNOTATION UPDATE)
PROTEIN.
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                                                                           MCELROY
                                                                                                                                                                         CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                      Score 46;
Pred. No.
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Pred.
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1.26e+02;
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                                                                          LOUKAS
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1.26e+02;
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                                      DATA BANKS
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                                                                           GIRDWOOD
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Best Local S
Matches
SEQUENCE FROM N.A.

X MEDLINE; 94150718.

A WILSON R., AINSCOUGH R., ANDERSON K., BAXNES C., BERKS M., BONFIELD J.,

A WILSON R., AINSCOUGH R., COPSEY T., COOPER J., COULSON A., CRAXYON M.,

A BURTON J., CONNELL M., COPSEY T., COOPER J., COULSON A., CRAXYON M.,

A LEAR S., DU Z., DURBIN R., FAVELLO A., FULTON L., GARDNER A., GREEN P.,

A HAWKINS T., HILLIER L., JIER M., JOHNSTON L., JONES M., KERSHAW J.,

A KIRSTEN J., LAISTER N., LATREILLE P., LIGHTNING J., LLOYD C.,

A KIRSTEN J., LAISTER N., LATREILLE P., LIGHTNING J., LLOYD C.,

A KIRSTEN J., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,

A MCMURRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,

A SONNHAMMER E., STADEN R., SULSTON J., THIERRY-MIEG J., THOMAS K.,

A VAUDIN M., VAUGHAN K., WATERSTON R., WATSON A., WEINSTOCK L.,

WILKINSON-SPROAT J., WOHLDMAN P.;

T elegans.";
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Best Local S
Matches
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045303; 045877;
01-JUN-1998 (TREMBLREL 06
01-NOV-1998 (TREMBLREL 06
01-NOV-1998 (TREMBLREL 06
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041898

041898;

01-JAN-1998 (TREMBLREL 0

01-JAN-1998 (TREMBLREL 0

01-NOV-1998 (TREMBLREL 0
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SIGNAL; ALLERGEN.
SIGNAL 1
SEQUENCE 403 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
BADGE J.L., KASHIWAZAKI S., LOCK S
BADGE J.L., KASHIWAZAKI S., LOCK S
EUR. J. PLANT PATHOL. 0:0-0(1997).
EMBL; U95205; G2443461; -.
PFAM; PF00767; Poty_coat; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                         CAENORHABDITIS ELEGANS EUKARYOTA; METAZOA; NEI RHABDITINA; RHABDITOIDI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C45G3.3
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RICE NECROSIS MOSAIC VIRUS.
VIRUSES; SSRNA POSITIVE-STRAND VIRUSES,
                                                                                                                                                                                                                                                                                                                                                 SUBMITTED
                                                                                                                                                                                                                                                                                                                                                                           BARLOW
                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM
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NON_TER
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Local Similarity 100.0%;
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421 AA;
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46833
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Pred. No.
0; Misma
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Pred. No.
2; Misma
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LAST SEQUENCE UPDATE)
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1.26e+02;
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1.26e+02;
                                                                                                                                                                                                                            BAYNES C., BERKS M., BONFIELD PER J., COULSON A., CRAXTON M.,
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ODERINAE; CAENORHABDITIS.
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Best Local S
Matches
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Best Local
                           SEQUENCE FROM N.A.

MEDLINE: 97345663.

AZARIAN S.M., TRAVIS G.H.;

"The photoreceptor rim protein is gene for recessive Stargardt's diffEBS LETT. 409:247-252(1997).
                                                                                                                                                                                                                                                                                                                                                                                              JLT 19
015112;
015112;
01-JAN-1998
01-AUG-1998
01-NOV-1998
ATP-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1476
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MEDLINE; 97207641.

ALLIKMETS R., SINGH N., SUN H., SHROYER N.F., HUTCHINSO CHIDAMBARAM A., GEBRARD B., BAIRD L., STAUFFER D., PEIF RATTNER A., SMALLWOOD P., LI Y., ANDERSON K.L., LEWIS R LEPPERT M., DEAN M., LUPSKI J.R.;

"A photoreceptor cell-specific ATP-binding transporter mutated in recessive Stargardt macular dystrophy.";

NAT. GENET. 15:236-246(1997).

EMBL; U88667; G1888527; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-MAY-1997
01-NOV-1998
01-NOV-1998
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EMBL; 292780; E1321927; -.
EMBL; AL021466; E1321927; JOINED.
EMBL; AL021466; E1315522; -.
EMBL; 292780; E1315522; JOINED.
SEQUENCE 912 AA; 104030 MW; 1
gene
FEBS
[2]
                                                                                                                                                                                                                                                         HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABCR.
HOMO SAPIENS (HUMAN).
HOMO SAPIENS (HUMAN).
CHORDATA;
CHORDATA;
CHORDATA;
CHORDATA;
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P78363;
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[3]
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Similarity 100.0%;
5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                              (TREMBLREL. 05, CREATED)
(TREMBLREL. 07, LAST SEQUENCE UPDATE)
(TREMBLREL. 08, LAST ANNOTATION UPDATE)
CASSETTE TRANSPORTER.
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(TREMBLREL 08, LAST SEQUENCE UF
(TREMBLREL 08, LAST ANNOTATION
CASSETTE TRANSPORTER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
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83.3%;
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., BAIRD L., STAUFFER D., PEIFFER A.,
EXIY., ANDERSON K.L., LEWIS R.A., NI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 46; I
Pred. No. 1.
0; Mismatc
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Pred. No. 1.26e+02;
0; Mismatches 1
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                                                             is an ABC transporter disease (ABCR).";
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MEDLINE; 98141
NASONKIN I., 1
SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE; 98163759.
GERBER S., ROZET J.M., VAN DE POL T.J.R.,
BLANKENAGEL A., KAPLAN J., CREMERS F.P.M.,
BLANKENAGEL A., TAPLAN J., CREMERS F.P.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                           1476 KQKWTQ
                                                                                                                                HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
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EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
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SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ
EMBL; AF000148; G3243082; -.
EFAM; PF00005; ABC_tran; 2.
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SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
EMBL; AF001945; G2959643; -.
SEQUENCE 2273 AA; 255991 MW; D8A82C98 CRC32;
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SEQUENCE 2273 AA;
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AZARIAN S.M., TRAVIS
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larity 83.3%;
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TO EMBL/GENBANK/DDBJ DATA BANKS
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LAST ANNOTATION UPDATE)
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HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
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                                                                                                                                                                                                                                                                                                                                                                                                  Score 46; DB 4; I
Pred. No. 1.26e+02;
0; Mismatches 1
                                                                                                                                                                                           PRT;
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                                                                                    ON UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 2273;
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RA AZEYEDO V., BERTERO M.G., BESSIRRES P., BOLOTIN A. M., BUNCHERT S., RA AZEYEDO V., BERTERO M.G., BESSIRRES P., BOLOTIN A., BORCHERT S., RA AZEYEDO V., BERTERO M.G., BESSIRRES P., BOLOTIN A., BORCHERT S., RA DORRISS R., BOURSIER L., BRANS A., BRAUN M., BRIGHELL S.C., BRON S., RA BORISS R., BRUSCHI C.V., CALLWELL B., CAPUDANO V., CARTER N.M., RA DENIZOT F., DEVLNE K.M., DUSTERROT A., EHRLICH S.D., EMMERSON P.T., RA DENIZOT F., DEVLNE K.M., DUSTERROT A., EHRLICH S.D., EMMERSON P.T., RA DENIZOT F., DEVLNE K.M., DUSTERROT A., EHRLICH S.D., EMMERSON P.T., RA CHOILST K.D., FUNDA S., GALIZZI A., GALLERON N., GHIM S.Y., RA CHOILST K.D., FORDAY S., GALIZZI A., GALLERON N., GHIM S.Y., RA CHOLLAR R., FUJITA Y., FUMA S., GALIZZI A., GALLERON N., GHIM S.Y., RA GUY B.J., HAGA K., HAIECH J., HARWOOD C.R., HENAUT A., HILBERT H., RA HOLSAPPEL S., HOSONO S., HULLO M.F., ITAYA M., JONES L., JORIS B., RA KOETTER P., KONINGSTEIN G., KROGH S., KUMANO M., KLEIN C., KOBAYASHI Y., RA HOLSAPPEL S., LAUBER J., LAZAREVIC V., LEE S.M., LEVINE A., LIU H., RA HOLSAPPEL S., LAUBER J., LAZAREVIC V., LEE S.M., LEVINE A., LIU H., RA HOLSAPPEL S., NOBACK M., NOONE D., O'REILLY M., OGAWA K., RA MOESTI D., NAKAI S., NOBACK M., NOONE D., O'REILLY M., OGAWA K., RA MOESTI D., NAKAI S., NOBACK M., NOONE D., O'REILLY M., OGAWA K., RA MOESTI D., NAKAI S., NEDIGUE C., MEDINAN N., MELLADO R.P., MIZUNO M., RA MASUDA S., MAUEL C., MEDIGUE C., MEDINAN N., MELLADO R.P., MIZUNO M., RA MASUDA S., SADAIE Y., SATO T., SCANLAN E., SCHLEICH S., RA RAPOPORT G., REYNOLDS S., RIEGER M., RIVOLTA C., ROCHA E., RA PORNOLLIK S., PARK S.H., PARKO V., POHL T.M., PORTETELLE D., RA RAPOFORT H., TAKEMARU K., TAKEMARU T., TANAKAT T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
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Best Local Similarity
Matches 5; Conse
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NADELLI B., PIPPALLA V., GE
GENTZ R., GAROTTA G.;
J. EXP. MED. 0:0-0(0).
EMBL; 085768; G1916252; -.
EMBL; 085768; G1916252; -.
PFAM; PF00048; Il8; 1
SEQUENCE 119 AA; 13119 MY
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031562;
031562;
01-JAN-1998
01-JAN-1998
01-NOV-1998
                                                  STRAIN-168;
KUNST F., OGASAWARA N.,
SUBMITTED (NOV-1997) TO
                                                                                                                                                                                                                              "The complete subtilis.";
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BACTERIA; FIRMICUTES;
SEQUENCE FROM N.A.
                                                                                                                                        SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 98044033
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                                                                                                                                                                                                 NATURE 390:249-256(1997).
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larity 83.3%;
Conservative
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                                                  YOSHIKAWA H., DANCHIN A.;
EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MW;
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GENTZ S.,
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LAST ANNOTATION UPDATE)
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Mismatches 1;
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THOTAKURA
                                                                                                                                                                                                                                                   gram-positive
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PARMELEE D.,
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                                                   01-AUG-1998 (TREMBLREL. 07, CREAT 01-AUG-1998 (TREMBLREL. 07, LAST 1-101-NOV-1998 (TREMBLREL. 08, LAST HYPOTHETICAL 53.8 KD PROTEIN (FR S HOMO SAPIENS (HUMAN).
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Matches 4; Conser
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Best Local Similarity
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017645;
017645;
01-JAN-1998
01-JAN-1998
01-NOV-1998
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MILSON R., AINSCOUGH R., ANDERSON K., BAYNES C., BERKS M., BONFIELD WILSON R., CONNELL M., COPSEY T., COOPER J., COULSON A., CRAXTON M., BURTON J., CONNELL M., COPSEY T., COOPER J., COULSON A., CRAXTON M., BURTON L., GARDNER A., GREEN BURTON L., CORSHAW J., DEAR S., DU Z., DURBIN R., FAVELLO A., FULTON L., JONES M., KERSHAW J., LAUSTER L., JIER M., JOHNSTON L., JONES M., KERSHAW J., KIRSTEN J., LAITEILLE P., LIGHTNING J., LLOYD C., MCMURRAY A., MORTINORE B., O'CALLAGHAN M., PARSONS J., PERCY C., MCMURRAY A., MORTINORE D., SYNDROPS D. SHOWNKEEN R., SMALDON N., SMITH F
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060646
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"2.2 MD of contiguous nucleotide sequence from chromosome III elegans.";
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257-262(1996).

EMBL; 299108; E1182829; -.

EMBL; D85082; D1025376; -.

SEQUENCE 178 AA; 20666 MW;
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  SEQUENCE
                                           CATARRHINI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NATURE 368:32-38(1994).
EMBL; Z81479; Ell86781;
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                                                                                                                                                                                                                                                                                                                                                                        178 KQMWIQ 183
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                                           HOMINIDAE;
                                                                                                                                                                                                                                     PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781; -.
45051 MW;
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                                                                                                                                 07, CREATED)
07, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                    Score 45; DB 5; I
Pred. No. 1.83e+02;
2; Mismatches 0
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Pred. No. 1.83e+02;
2; Mismatches 0;
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                                                                    VERTEBRATA;
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                                                                 MAMMALIA;
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                                                                 EUTHERIA;
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RESULT 26

ID Q23206 PRELIMINARY; PRT;

AC Q23206;

DT 01-NOV-1996 (TREMBLREL. 01, CREATE
DT 01-NOV-1996 (TREMBLREL. 07, LAST A

DT 01-NOV-1996 (TREMBLREL. 07, LAST A

DT 01-NOV-1998 (TREMBLREL. 07, LAST A

DE SIMILARITY TO NUCLEOLUS-CYTOPLASM
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Best Local Similarity
Matches 4; Conse
Query Match
Best Local
                                                                                                                                                                                                                                                 WILSON R., AINSCOUGH R., ANDERSON K., BAYNES C., BERKS M., BONFIELD BURTON J., CONNELL M., COPSEY T., COOPER J., COULSON A., CRAXTON M. DEAR S., DU Z., DURBIN R., FAVELLO A., FULTON L., GARDNER A., GREEN HAWKINS T., HILLIER L., JIER M., JOHNSTON L., JOHS M., KERSHAW J., KIRSTEN J., LAISTER N., LATREILLE P., LIGHTNING J., LLOYD C., KIRSTEN J., LAISTER N., CALLAGHAN M., PARSONS J., PERCY C., DISTERRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,
                                                                                                                                                                                                                                                                                                               STRAIN-BRISTOL N2;
WILSON R., AINSCOUGH R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUBMITTED (MAR-1998) TO E EMBL; AF055010; G3005733;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 YU W., ANDERSSON B., WORLEY K.C.,
RICAFRENTE J.Y., WENTLAND M.A., LI
"LAT99-SCALE CONCASTENATION CDNA SE
GENOME RES. 7:353-358(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE-BRAIN;
MEDLINE; 96207227.
ANDERSSON B., WENTLAND M.A., RICAFRENTE J.Y., LIU W., G
"A "double adaptor" method for improved shotgun library
                                                                                   SEQUENCE FROM N.A. STRAIN-BRISTOL N2;
                                                                                                                                                  SEQUENCE FROM N.A. STRAIN-BRISTOL N2;
                                                                                                                                                                                                                SONNHAMMER E., STADEN R., VAUDIN M., VAUGHAN K., WA
                                                                                                                                                                                                                                        RIFKEN L.,
                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                    RHABDITINA;
                                                                                                                                                                                                                                                                                                                                                                               EUKARYOTA; METAZOA; NEMATODA;
                                                                                                                                                                                                                                                                                                                                                                                           CAENORHABDITIS ELEGANS
                                                                                                                                                                                                                                                                                                                                                                                                         W06E11.1.
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ANAL. BIOCHEM. 236:107-113(1996).
                                    SEQUENCE
                                                 EMBL;
                                                            SUBMITTED (FEB-1995) TO EMBL/GENBANK/DDBJ DATA
                                                                          WATERSTON
                                                                                                                          SUBMITTED
                                                                                                                                                                                                    WILKINSON-SPROAT J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HYPOTHETICAL PROTEIN.
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                                                                                                                                                                                       NATURE 0:0-0(0).
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                                  U20862; GI
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Similarity
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                                                                                                                                                                                                                                                                                                                                                                    RHABDITOIDEA;
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                                   G669020; -.
3 AA; 55009
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53799
84.9%;
83.3%;
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                                                                                                                                                                                                             SAUNDERS D., SHOWNKEEN R., SMALDON N., R., SULSTON J., THIERRY-MIEG J., THOMAN, WATERSTON R., WATSON A., WEINSTOCK L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL/GENBANK/DDBJ
                                                                                                                           EMBL/GENBANK/DDBJ
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                                    ¥.
                                                                                                                                                                                                                                                                                                                                                                   DDA; SECERNENTEA; RHABDITIA; RHABDITIDA; RHABDITIDA; PELODERINAE; CAENORHABDITIS
Score 45;
Pred. No.
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
OPLASM SHUTTLE PHOSPHOPR
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Pred. No. 1.83e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
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DB 5; I
1.83e+02;
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                                                                                                                           DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                    PHOSPHOPROTEIN.
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          Length 483;
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                                                             BANKS
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                                                                                                                                                                                                                            THOMAS
                                                                                                                                                                                                                                                                                                     CRAXTON M.,
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                                                                                                                                                                                                                                                                                           GREEN P.,
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RESULT
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023532 PRELIMINARY;
023532;
01-JAN-1998 (TREMBLREL 0
01-JAN-1998 (TREMBLREL 0
01-NOV-1998 (TREMBLREL 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       062146;
062146;
01-AUG-1998
01-AUG-1998
01-NOV-1998
                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

BEVAN M., STIEKEMA W., MURPHY G., WA

KREIS M., KAVANAGH T., ENTIAN K.D.,

KREIS M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE;
WILSON R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAEMORRABDITIS ELEGANS.
CAEMORRABDITIS ELEGANS.
EUKARYOTA; METAZOA; NEMATODA; SECERNENTEA; RHABDITIA; RHABDITIDA;
RHARDITINA; RHABDITOIDEA; RHABDITIDAE; PELODERINAE; CAENORHABDITIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WILSON R., AINSCOUGH R., ANDERSON K., BAYNES C., BERKS M., BONFIELD BURTON J., CONNELL M., COPSEY T., COOPER J., COULSON A., CRAXTON M., DEAR S., DU Z., DURBIN R., FAVELLO A., FULTON L., GARDNER A., GREEN HAWKINS T., HILLIER L., JIER M., JOHNSTON L., JONES M., KERSHAW J., KIRSTEN J., LAISTER N., LATREILLE P., LIGHTNING J., LLOYD C., MCMURRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C., RIFKEN L., ROOPRA A., SAUNDERS D., SHOWKEEN R., SMALDON N., SMITH SONNHAMMER E., STADEN R., SULSTON J., THIERRY-MIEG J., THOMAS K., VAUDIN M., VAUGHAN K., WATERSTON R., WATSON A., WEINSTOCK L., WILKINSON-SPROAT J., WOHLDMAN P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ARABIDOPSIS THALIANA (MOUSE-EAR CRESS).

EUKARYOTA; VIRIDIPLANTAE; CHAROPHYTA/EMBRYOPHYTA GROUP; EMBRYOPHYTA;

TRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA;

CUDICOTYLEDONS; ROSIDAE; CAPPARALES; BRASSICACEAE; ARABIDOPSIS.
                                                                                                                                                                                      PUIGDOMENECH P., HATZÓPOULOS P., OBERMAJ
JONES J., PALME K., ANSORGE W., DELSENY
SCHUELLER C., CHALMATZIS N.;
SUBMITTED (JUL-1997) TO EMBL/GENBANK/DDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         elegans.";
NATURE 368:32-38(1994).
EMBL; Z83104; E1297723;
   SUBMITTED (JUI EMBL; 297342;
                                   EU ARABIDOPSIS SEQUENCING PROJECT, ESSA; SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ
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                                                                                                                  SEQUENCE FROM N.A.
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B (TREMBLREL.
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68139 MW;
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08,
                                                                                                                                                                                             EMBL/GENBANK/DDBJ
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Pred.
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                                                                                                                                                                                                                                                                                                , WAMBUTT R., POHL T., TERRYN D., RIEGER M., JAMES R., OBERMAIER B., DUESTERHOFT A.,
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AM. J. BOT. 84:253-273(1997).
EMBL; U48553; E309444; -.
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PFAM; PF00931; NB-ARC; 1.
SEQUENCE 1038 AA; 117379
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TRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA;
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EUKARYOTA; METAZOA; CHORDATA;
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DNA RES. 4:345-349(1997).
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P-PSDB; R06398.

Human monocyte chemotactic factor type polypeptide and DNA encoding it - useful as antibacterial and antitumour agents. It is encoding it - useful as antibacterial and antitumour agents. Scalaim 2; Page 25; 27pp; English.

Claim 2; Page 25; 27pp; English.

Chaim 2; Page 26; 27pp; English.

Chaim 2; Page 25; 27pp; English.

Chaim 2; Page 26; 27p
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Best Local
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Monocyte chemoattractant protein analogue MCP-1 (10-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
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W13598;
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R06398;
14-DEC-1990 (first entry)
                                                                                                       lung
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01-JAN-1989; JP-000065.

03-FEB-1989; JP-026438.

(USDC ) US SEC OF COMMERCE.
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nes 11; Conse
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                                                                                sapiens.
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larity 91.7%;
Conservative
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/note="Claim 1"
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Pred. No. 1.00e-02;
0; Mismatches 1
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Eotaxin chemoattracta
Guinea pig eosinocyte
Human interleukin-8 u
Chimeric interleukin-
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beta-chemokine
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Similarity 11; Conser

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                                                                                                           Disclosure; Page 5; 27pp; English.

The present sequence represents an analogue, MCP-1 (11-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the N-terminal amino acids 1-10 of MCP-1, acts as an antagonist of MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammation sites. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared
                                                                                                      providing with 75:1
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The present sequence represents an analogue, MCP-1 (10-76), of monocyte The present sequence represents an analogue, which lacks the
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Monocyte chemoattractant protein analogue MCP-1 (11-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte;
chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) lacks MCP-1 activity and inhibits receptor binding, useful as
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19-JUN-1995; CA-152141.
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WPI; 97-165844/16.
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(LEWI/) LEWIS I.
                                                                                                                                                                                                                                                                                                                                                                                               anti-inflammatory agent
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       lung disease.
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11; Conser
                                                                                 for prior 67 AA;
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llarity 91.7%;
Conservative
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                     89.1%;
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Score 90; DB 24;
Pred. No. 2.12e-02;
0; Mismatches 1
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Pred. No. 2.12e-02;
0; Mismatches 1;
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EICLDPKQKWVQ

peptide; 68 AA.

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RESULT ID RESULT RESULT
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Best Local S
Matches 1
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disulfide_bond 5..45
disulfide_bond 5..45
w09513295-A1.
18-MAY-1995.
77-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER II
ROLlins B, Zhang YJ;
WPI; 95-215051/28
Human monocyte chemo-attractant protein-1 (MCP-1) derivs capable of inhibiting the monocyte chemo-attractant active endogenous MCP-1 and can be used to treat restenosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7 5
R87678 standard; protein; 69
R87678;
21-FEB-1996 (first entry)
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Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
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w13597;
07-NOV-1997 (first entry)
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monocyte chemoattractant protein; MCP-1; mutant; restenosis;
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Claim 7; Page 5; 27pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-DEC-1996.
19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
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91.7%;
                                                  monocyte chemo-attractant activity
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Mismatches 1; Indels
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                                                                                                                                                                                                                           The present sequence represents an analogue, MCP-1 (8-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the CN-1 tacks MCP-1 biological activity and inhibits binding to a MCP-1 creeptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared with 75:1 for prior art mutant 7ND.

Sequence 69 AA;
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Matches 1
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Best Local
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WPI; 97-165844/16.
N-terminally truncated monocyte chemo:attractant
lacks MCP-1 activity and inhibits receptor bindin
anti-inflammatory agent
Claim 5: Page 5; 27pp; English.
Claim 5: Page 5; 27pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.
            W09374 standard; Protein; W09374; 21-MAR-1997 (first entry)
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W13596;
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19-JUN-1995;
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Mismatches 1;
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      Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-NOV-1996.
22-OCT-1992; 965678.
22-OCT-1992; US-965678.
27-MAY-1994; US-250958.
(UNNI ) UNIV MICHIGAN.
Kunkel SL, Lyle LR, Strieter RM;
WPI; 96-505405/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This is the amino acid sequence of the human monocyte chemoattractant protein (MCP)-1, a member of the C-C chemokine family. MCP-1 is a potent stimulator of monocyte chemotaxis and is produced by injured vascular smooth cells thus attracting monocytes and macrophages which infiltrate the injured area and release growth factor. This causes proliferation of the vascular smooth cells resulting in restenosis. The gene sequence can be used to generate antisense sequences e.g. T48093-7, which can be used to inhibit in vitro MCP-1 prodn. by mononuclear cells e.g. lymphocytes or macrophages, or smooth muscle cells, esp. in order to prevent vascular restenosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Peptide Glioma;
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P90292;
17-JAN-1990
                                                                                                        Disclosure; page 3; 46pp; English. Peptide is derived from glioma celleukocytes and has mol. wt. 8400.
                                                                                                                                                                                              New peptide with specific chemotactic a from glioma or leucocyte cells, useful
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                                                                                          Sequence
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mononuclear cell; lymphocyte; macrophage; smooth muscle cell:
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Best Local S
Matches 1
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07-NOV-1994; US-152301.
12-NOV-1993; US-152301.
(DAND) DANA PARBER CANCER II
ROLlins B, Zhang YJ;
WPI; 95-215051/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R53398;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        endogenous MCP-1 and can be used to treat restenosis

Claim 3; Page 11; 22pp; English.

Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28 Tyr by Leu and/or 30 Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1089.

The peptides can be used to prevent restenosis, e.g. in patients sequence of the parent protein disclosed in patients.
                                                                                                                                                  28-APR-1994.
20-OCT-1993; U10074.
22-OCT-1992; US-965678
(MLCW ) MALLINCKRODT M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antisense; RNA; DNA; monocyte chemotactic radionuclide; vascular restenosis; alpha; diagnosis; monocytes; vascular injury.
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R87675
R87675;
Anti-sense monocyte chemotactic protein-1 oligo:nucleotide(s) and peptide(s) - is used for inhibiting, treating or imaging areas of
                                                                             Lyle LR;
WPI; 94-151314/18.
                                                                                                                                                                                                                                                                                                                                                                                     misc_difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sense MCP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human monocyte chemo-attractant protein-1 (MCP-1) derivs. capable of inhibiting the monocyte chemo-attractant activ
                                                                                                                                                                                                                                                                                                            WO9409128-A.
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WO9513295-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mammalian.
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12..52
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91.7%;
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Pred. No. 2.12e-02;
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beta; emitting is
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                                                                                                                                                                                                                                                                          FPT Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are grapable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis Claim 5; Page 11; 22pp; English.

CM Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations cree; (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino caids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients
                                                                                                                                                                           Query Match
Best Local S
Matches 1
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R28660 standard; Protein; 76 AA. R28660; 24-MAR-1993 (first entry)
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07-NOV-1994; U12874.

12-NOV-1993; US-152301.

(DAND ) DANA FARBER CANCER INST INC.

ROllins B, Zhang YJ;

WPI; 95-215051/28.
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(24-Arg) MCP-1.
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mes 11; Conser
                                                                                                                                           50 eicadpkqkwvq 61
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Local Similarity 91.7%;
les 11; Conservative
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                                                                                                                                                                                                                                                coronary artery angioplasty. 76 AA;
                                                                                                                                                                           89.1%;
larity 91.7%;
Conservative
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given in R53398-99 represent sense and antisense
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24
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Pred. No. 2.12e-02;
0; Mismatches 1;
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Pred. No. 2.12e-02;
0; Mismatches 1
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PD 18-MAY-1995.
PF 07-NOV-1994; U12874.
PF 07-NOV-1994; U12874.
PF 07-NOV-1994; U12874.
PR 12-NOV-1995; US-152301.
PR (DAND) DANA FARBER CANCER INST INC.
PA (DAND) DANA FARBER CANCER INST INC.
PI Rollins B, Zhang VJ;
PR WPI; 95-Z15051/28.
PR rollins Are mutated such treat restenosis, e.g. in patients
PR rollins Provided that the derivative has not been modified by the cardenomic coronary andioblasty.
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Best Local Similarity
Matches 11; Conser
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Best Local (
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N-PSDB; Q30745-46:
Prodn. of polypeptide(s) having monocyte chemotactic activity using expression plasmids with E. coli elements and specific E.coli strains
E.coli strains
Claim 1; Page 48 + Page 36; 56pp; English.
An expression plasmid, pHM483, for producing MCF(76) consisting of 76 amino acids was constructed. The prod. can be used for treating bacterial infectious diseases.
Sequence 76 AA;
                                                                               undergoing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           angioplasty.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-NOV-1992.
27-APR-1992; J00550.
09-MAY-1991; JP-135950
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modified_site
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1 EICLDPKQKWVQ 12
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Local Similarity 91.7%;
hes 11; Conservative
                                                                 coronary artery angioplasty.
76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                           /note=
11..36
12..52
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Score 90; DB 14;
Pred. No. 2.12e-02;
0; Mismatches 1
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Pred. No. 2.12e-02
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Best Local S
Matches 1
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25-FEB-1997.

505-CCT-1992; US-956863.

R 05-CCT-1992; US-956863.

R 02-AR-1994; US-9568659.

R (MLCW ) MALLINCKRODT MEDICAL INC.

MICW ) MALLINCKRODT MEDICAL INC.

R (UNMI ) UNIV MICHIGAN.

KUNNEI SL, Lyle LR, Strieter RM;

R WPI; 97-153541/14.

R WPI; 97-153541/14.

R RAGio:labelling neutrophil-activating peptide(s) - for reading and the stricts of the stricts of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO95077Î0-A1.
23 MAR-1995.
13-SEP-1994; J01512.
13-SEP-1993; JP-227385.
(TORA) TORAY IND INC.
MATSUSHIMA K, NATUTO M;
WPI; 95-131181/17.
                 targetted delivery of radioactive agent Example 10; Column 19-20; 15pp; English.
Will31 represents mature human monocyte chemoattractant protein-1
(MCP-1). MCP-1 was radionuclide labelled and used in a method for imaging a target site in vivo in an animal. Labelled MCP-1 was allowed to accumulate at a target site (having MCP-1 receptors) in the animal and detected so as to image the target site. Any Cys-Cys or Cys-Xaa-Cys chemokine carrying either iodine-123 or iodine-131 can be used in the method. Especially preferred is neutrophil activating peptide-2 (NAP-2) which recognises interleukin-8 receptors and is labelled with technetium-99m, indium-111, copper-62, rendum-186 or rhenium-188.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-JUN-1997 (first entry)

Mature human monocyte chemoattractant protein-1 (MCP-1).

MCP-1; mature chemoattractant protein-1; cytokine; interleukin-8;

MCP-1; neutrophil activating peptide; labelling; inaging; targeting;

II-8; neutrophil activating peptide; labelling; inaging; targeting;

radionuclide; infection; inflammation; neoplasm; atheromatous lesion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wound treatment using monocyte chemotactic factor - has potent therapeutic effect on skin wounds and ulcers
Disclosure; Page 12; 22pp; Japanese.
The invention relates to a new remedy for curing wounds which, instead of comprising a growth factor, comprises a monocyte chemotactic activating factor (MCAF) or its variants or derivatives. The factor has potent effect on skin wounds and ulcers. The present sequence is human MCAF, the activity of which is exemplified as the new remedy.
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11; Conse
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "X= any amino acid"
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Pred. No. 2.12e-02;
0; Mismatches 1
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factor; MCAF; wound remedy.
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inflammation
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Best Local S
Matches 1
WO9509232-A.
06-APR-1995.
28-SEP-1994;
28-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 5; 50pp; English.

This sequence represents the mature form of monocyte chemotactic protein-1 (MCP-1). MCD-1 is a member of the "C-C" family of chemoattractant cytokines or chemokines. It is a potent stimulator of monocyte chemotaxis and has an extemely high degree of specificity for this cell type. MCP-1 is produced by injured vascular smooth muscle cells and attracts the monocytes and macrophages which infiltrate the area, releasing growth factors and resulting in proliferation of vascular smooth muscle and restenosis. Nucleic acid molecules which are antisense to the MCP-1 mRNA may be used to inhibit translation of MCP-1 and so may be useful for inhibiting vascular restenosis, partic. following balloon angioplasty or a related process. The molecule may be radiolabelled to increase its therapeutic effect or for imaging areas of potential
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
WO9519167-A1.
20-JUL-1995.
                                                                                      Human monocyte chemoattractant factor hMCP-1; chemokine; v
Human monocyte chemoattractant factor; hMCP-1; chemokine; v
meningitis related homologous antigenic sequence; MRHAS; RV
immunoassay; diagnosis; treatment; prophylactic; bacterial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N-PSDB; T03528.

N-PSDB; T03528.

New anti:sense oligo:nucleotide(s) and peptide(s) for inhibiting restenosis - are directed against C-C family cytokine(s) such as restenosis - hemotactic protein, opt. radio:labelled for therapy or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense; monocyte chemotactic protein-1; MCP-1; "C-C" family; chemoattractant cytokine; chemokine; monocyte; chemotaxis; vascular smooth muscle cell;
                                                                           viral
                                                                                                                                                  05-DEC-1995 (first entry)
                                                                                                                                                                   R73914 standard; protein; R73914;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                neoplasm, atheromatous lesion or restenosis
Sequence 76 AA;
                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lyle LR, Thomas-Mi
WPI: 95-263703/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-JAN-1995; U00605.
14-JAN-1994; US-182917.
(MLCW ) MALLINCKRODT MJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          proliferation; restenosis; balloon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-MAR-1996
Mature MCP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R86859 standard; Protein; 77
                                                                                                                                                                                                                                                                                                                                                                               restenosis.
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                                                                                                                                                                                                                                                                                                                    89.1%;
91.7%;
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91.78;
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Pred. No.
0; Misma
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Pred. No. 2.12e-02;
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2.12e-02;
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The detecting and preventing meningitis claim 47; Fig 8/10; 98pp; English.

R73914 is the chemokine Human monocyte chemoattractant factor hMCP-1.

R73914 is the demokine Human monocyte chemoattractant factor hMCP-1.

R73915 and R73907, which are recognised by a monoclonal antibody from the hybridoma Rubella virus (RV)-1. The claimed MRHAS peptides may be used in immunoassays to diagnose the presence of bacterial and/or viral meningitis agents in a sample, or in prophylactic and therapeutic meningitis treatments. The peptides may also be used as the receines against meningitis.

RB: Identified by matching corresponding MRHAS peptides.
                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                    vector, and glutathione Sequence 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Screening for cpds. with anti-heparanase activity - by detecting inhibition of heparin or heparan sulphate degradation, potentially useful for treating arthritis, restenosis, cancer. Claim 13: Page 49: 60pp; English.
Purified heparanases, prepared under reducing conditions and activated with transglutaminase, are given in R70786-804. Most are prepared by reverse transcription of the cDNA into pWL1392 baculovirus vector, and expression in Sf9 cells in the presence of reduced glutathione and dithiothreitol.
Human monocyte chemo-attractant peptide: inflammatory disease; neoplasms
                                                                                    P95387 standard; protein; 99
P95387;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UPJO ) UPJOHN CO.
Hoogwerf AJ, Ledbetter
WPI; 95-082239/11.
N-PSDB; Q85370.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-FEB-1995.
26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
WO9504158-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chemoattractant protein MCP-1.
MCP-1; chemoattractant; heparanase; heparin; heparanarthritis; restenosis; cancer; wound healing.
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(VALS/) VAN ALSTYNE D.
Sharma LR, Van Alstyn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-AUG-1995
                                                        25-JUL-1989 (first entry)
                                                                                                                                                                                                                                                 73 eicadpkqkwvq 84
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27-APR-1992; J00550.
29-MAY-1991; JP-135950.
(DAIN ) DAINIPPON PHARM CO LTD.
Fukui T, Matsuo N, Yamada M, Yam
WPI; 92-398864/48.
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R28663 standard; Protein;
R28663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human derived monocyte chemo-attractant peptide prods. - obtd. from human glioma cell line U-105MG or peripheral blood mononuclear leukocytes. Disclosure; fig 2; 66pp; English.

Disclosure; hig 2; 66pp; English.

This is a human-derived monoyte chemo-attractant peptide (MCP-1) sequence MCP-1 exhibits optimal chemotactic activity at a concn. of lnM and has a mol. mass of c.a. 8,400 D. MCP-1 can be used for treating infection eg inflammatory disease, or for the control of neoplasms by accumulation of monocytes at the site of the infection. The corresp. DNA is obtd. by chemical synthesis, by screening reverse trascripts of mRNA from purified blood leukocytes or cell cultures of eg U-373 MG or KMG-5.
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25-JUL-1989;
30-MAR-1989;
30-MAR-1989;
                                                                                                                                                                                         Disclosure; Page 43-44; 56pp; English.
An expression plasmid, pHMC076 for producing MCF(76) consisting of 76 amino acids was constructed. DNA encoding MCF(76) was prepd. using a recombinant plasmid pHMCF7.

Sequence 99 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (USSH) US Dept. Health Yoshimura T, Robinson F WPI; 89-300683/41.
                                                                                                                                                                                                                                                                                                                              N-PSDB; Q30748.

Prodn. of polypeptide(s) having monocyte chemotactic activity using expression plasmids with E. coli elements and specific
                                                                                                                                                                                                                                                                                                                    E.coli strains
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larity 91.7%;
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24..99
/label= mat_protein
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07-W0Y-1996.
04-WAY-1995; U05668.
04-WAY-1995; W0-U05668.
(SCRI) SCRIPPS RES INST.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthesis of protein by chemical ligation of unprotected peptide(s) by reaction of N-terminal Cys with C-terminal thioester and spontaneous rearrangement of intermediate prod.

Example 3; Page 47; 61pp; English.

The present peptide, which has an amino-terminal cysteine residue, was used in a novel synthesis method, comprising the ligation of a lst oligopeptide (OP) to a 2nd OP, end to end, to produce an OP product. This comprises mixing the 1st and 2nd OP (which have a carboxy-terminal thioester and an amino-terminal Cys with an analysis of the carboxy terminal thioester and an amino-terminal Cys with an analysis of the carboxy terminal cys with an analysis of the carboxy terminal thioester and an amino-terminal Cys with an analysis of the carboxy terminal cys with an analysis of the cys with analysis of the cys with analysis of the cys with an analysis of the cys with an analysis of the cys with any with analysis of the cys with analysis of t
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NAF(44-72) peptide inhibitor of neutrophil activating factor.
bronchitis; neutrophil chemotaxis; ARDS.
Synthetic.
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NAF(44-72) is a preferred peptide derived from NAF which is antagonistic to NAF and has no chemotactic activity. It inhibited NAF-induced migration by 34 per cent. When used with a second preferred peptide, i.e. NAF(3-25) (see R20236) inhibition was 70
                                                                                                     unoxidised SH side chain) in a solution containing a catalytic thiol, condensing the terminal groups to form an intermediate OP, in which components are linked by a beta-aminothioester bond and rearranging the bond to give a product OP linked by an amide bond. The method can be used for the production of full length proteins, which can be made into native, disulphide containing proteins by refolding and oxidisation. The method also combines chemoselective, unprotected, peptide reactions, with native peptide bond formation, increasing the size of protein that can be made by chemical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JUL-1997 (first entry) used in novel synthesis method. Interleukin.8(34-72) used in novel synthesis method. Thioester; synthesis; ligation; catalysis; thiol; condensation; link; beta-aminothioester; bond; amide; production; disulphide; refolding; oxidisation; interleukin 8; IL-8.
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W04515;
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05-FEB-1990; 475658
05-FEB-1990; US-475
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                                                        synthesis.
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75.0%;
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Pred. No. 5.71e-02;
3; Mismatches 0
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Best Local
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R38087
for treatment of inflammation Claim 19; Page 29; 47pp; English.
The sequence is that of an analogue of interleukin-8 (IL-8) compr:
IL-8 residues 6-72. It is able to bind neutrophils and act as a competitive antagonist of IL-8, i.e. it can be used to treat inflammation, e.g. by intravenous injection or oral admin. It can act as a neutrophil activator and so can be used to stimulate an inflammatory response.

Sequence 67 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          wPI; 93-196997/24.

New interleukin-8 analogues modified in specified region - used as neutrophil activators or for blocking effect of IL-8 on neutrophil(s) for treatment of inflammation claim 23; Page 30; 47pp; English.

The sequence is that of an analogue of interleukin-8 (IL-8) comprising IL-8 residues 3-69. It is able to bind neutrophils and act as a competitive antagonist of IL-8, i.e. it can be used to treat inflammation, e.g. by intravenous injection or oral admin. It can act as a neutrophil activator and so can be used to stimulate an act as a neutrophil activator and so can be used to stimulate an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Modified human interleukin-8 analogue (3-69).
Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; IL-8; inflammation; treatment; chemotax
                                                                                                                                                                                                                                                                                                                                                                              10-JUN-1993.

03-DEC-1992; CA0528.

04-DEC-1991; US-801578.

(BIOM-) BIOMEDICAL RES CENT LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Modified human interleukin 8 analogue (6-72).
Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; IL-8; inflammation; treatment; chemotax activity; stimulation; inflammatory response.
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04-DEC-1991; US-801578.
(BIOM-) BIOMEDICAL RES
Clark-Lewis I, Moser B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           activity; stimulation; inflammatory response.
                                                                                                                                                                                                                                                             New interleukin-8 analogues modified in specified region - used as neutrophil activators or for blocking effect of IL-8 on neutrophil
                                                                                                                                                                                                                                                                                                                      Clark-Lewis I, Moser WPI; 93-196997/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
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|:||||::|||
1 EICLDPKQKWVQ 12
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Similarity 75.0%;
9; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein; 67
                                                                                                                                                                                                                                                                                                                                                       В,
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Pred. No. 5.71e-02;
3; Mismatches 0;
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RESULT RE
PN W09311159-A.

PD 10-JUN-1993.

PF 03-DEC-1991; CA0528.

PR 04-DEC-1991; US-801578.

PI (BIOM-) BIOMEDICAL RES CENT LTD.

PI (STATE-Lewis I, Moser B;

PI (STATE-Lewis I, Moser B;

PI (STATE-Lewis I) Hoser B;

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Matches
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Best Local :
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10-JUN-1993.

03-DEC-1992; CA0528.

04-DEC-1991; US-801578.

04-DEC-1991; US-801578.

(BIOM-) BIOMEDICAL RES CENT LTD.

Clark-Lewis I, Moser B;

WPI; 93-196997/24.

New interleukin-8 analogues modified in specified region - used as

New interleukin-8 analogues modified in specified region on neutrophil(s)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 17; Page 29; 47pp; English.

The sequence is that of an analogue of interleukin-8 (IL-8) comprising IL-8 residues 5-72. It is able to bind neutrophils and act as a competitive antagonist of IL-8, i.e. it can be used to treat inflammation, e.g. by intravenous injection or oral admin. It can act as a neutrophil activator and so can be used to stimulate an inflammatory response. It also has strong chemotaxis activity and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Modified human interleukin-8 analogue Ile5 (6-72).
Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; IL-8; inflammation; treatment; chemotaxis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R38083;
13-OCT-1993 (first entry)
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Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; IL-8; inflammation; treatment; chemotaxis;
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1 EICLDPKQKWVQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            85.1%;
larity 75.0%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
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3; M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 7; 5.71e-02; 0;
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D 10-JUN-1993.

O-DEC-1992; CA0528.

PR 04-DEC-1991; US-801578.

PA (BIOM-) BIOMEDICAL RES CENT LTD.

PA (BIOM-) BIOMEDICAL RES CENT LTD.

PI Clark-Lewis I, Moser B;

PR WPI; 93-196997/24.

PR WPI; 93-196997/24.

PR New interleukin-8 analogues modified in specified region - us neutrophil activators or for blocking effect of IL-8 on neut for treatment of inflammation

Olaim 9; Page 29; 47pp; English.
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                                                                                                                   PER CLIEBER OF THE STATE OF THE
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; II-8; inflammation; treatment; chemotaxis; activity; stimulation; inflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LT 28
R38081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 16; Page 29; 47pp; English.

The sequence is that of an analogue of interleukin-8 (IL-8) co IL-8 residues Gln5 (6-72). It is able to bind neutrophils and as a competitive antagonist of IL-8, i.e. it can be used to tr inflammation, e.g. by intravenous injection or oral admin. It act as a neutrophil activator and so can be used to stimulate inflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Modified human interleukin 8 analogue Gln5 (6-72).
Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; II-8; inflammation; treatment; chemotaxis; activity; stimulation; inflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            act as a neutrophil activator and inflammatory response. Sequence 68 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-JUN-1993.
03-DEC-1992; CA0528.
04-DEC-1991; US-801578.
(BIOM-) BIOMEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Modified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New interleukin-8 analogues modified in specified region - used as neutrophil activators or for blocking effect of IL-8 on neutrophil(s) for treatment of inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Clark-Lewis I, Moser B; WPI; 93-196997/24.
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13-OCT-1993 (first entry)
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US-801578.
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d. No. 5.71e-02;
Mismatches 0;
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No. 5.71e-02
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10-JUN-1993.
03-DEC-1992; CA0528.
04-DEC-1991; US-801578.
(BIOM-) BIOMEDICAL RES CENT LTD.
Clark-Lewis I, Moser B;
WPI; 93-196997/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 10; Page 29; 47pp; English.

The sequence is that of an analogue of interleukin-8 (IL-8) comprising IL-8 residues Ala4Ala5 (6-72). It is able to bind neutrophils and act as a competitive antagonist of IL-8, i.e. it can be used to treat inflammation, e.g. by intravenous injection or oral admin. It can act as a neutrophil activator and so can be used to stimulate an inflammatory response.

Sequence 69 AA;
                                                                                                              M22675
W22675;
19-MAR-1998 (first entry)
Droll+ chemokine betal0 or monocyte chemotactic protein 4 variant.
Human; chemokine betal0; Ck betal0; treatment; antagonist;
solid tumour; infection; autoimmune disease; asthma; antibody;
fibrotic disease; psoriasis; neurodegenerative disease;
wound healing; haematopoiesis regulation; gene therapy;
chromosome identification; monocyte chemotactic protein 4;
leukaemia; MCP-4; Drol3+ variant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Modified human interleukin-8 analogue Ala4Ala5 (6-72).
Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; IL-8; inflammation; treatment; chemotaxis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R38082 standard; protein;
R38082;
13-OCT-1993 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             neutrophil activators or for blocking for treatment of inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New interleukin-8 analogues modified in specified region - used as neutrophil activators or for blocking effect of IL-8 on neutrophil(s)
                                          Homo sapiens.
W09731098-A1.
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75.0%;
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No. 5.71e-02
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Prolypeptide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infection, asthma and fibrosis

Example 11; Fig 5; 83pp; English.

Chemotactic protein 4 (MCP-4) Drol3+ variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 be used to treat patients deficient in Ck beta10, while a Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases wound healing, regulates haematopoissis and generates antibodies. Labelled Ck beta10 can be used to the treat leukaemia contains a matibodies. Labelled Ck beta10 can be used to diseases. It also promotes wound healing, regulates haematopoissis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate.
                                                                                                    Query Match
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                                                                                                                                                                                 receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck betail CDNA can be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-FEB-1996; WO-U02598.
23-FEB-1996; WO-U02598.
(HUMA-) HUMAN GENOME SCI INC.
Adams M, Alderson R, Applebaum
Parmelee D, White J;
                         45 eicadpkekwvq
    1 EICLDPKQKWVQ 12
                                                                                                      Similarity
                                                                                   10;
                                                                                                                                                                    71 AA;
                                                                                   Conservative
                                          56
                                                                                                    85.1%;
83.3%;
                                                                                                    Score 86; DB 27;
Pred. No. 5.71e-02;
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1 95 94.1 95 2 JNO841 interleukin-8 - dog 8.37e-08 3 95 94.1 101 2 146997 interleukin-8 - sheep 8.37e-08 95 94.1 101 2 146997 interleukin-8 precurs 8.37e-08 95 94.1 103 2 A43253 alveolar macrophage c 8.37e-08 9 99.1 101 2 146871 interleukin-8 precurs 8.37e-08 8 98.1 99 2 JC2136 monocyte chemoattract 1.74e-06 98.5 1 99 2 A37034 interleukin-8 precurs 7.74e-06 98.5 1 99 2 A37034 interleukin-8 precurs 7.74e-06 98.5 1 99 2 A37034 interleukin-8 precurs 7.74e-06 98.6 85.1 101 2 148148 monocyte chemoattract 1.27e-05 98.2 99 2 JC2336 monocyte chemoattract 1.27e-05 98.2 99 2 JC2336 monocyte chemoattract 1.27e-05 98.2 99 2 JC2336 monocyte chemoattract 2.07e-05 98.2 99 2 JC2417 monocyte chemoattract 3.37e-05 98.1 80.2 120 2 I48857 monocyte chemoattract 3.37e-05 98.1 80.2 120 2 I48147 monocyte chemoattract 8.91e-05 98.1 80.2 120 2 I48147 monocyte chemoattract 8.91e-05 98.3 91.2 91.34467 monocyte chemoattract 8.91e-05 98.3 91.3 91.3 91.3 91.3 91.3 91.3 91.3 91	Statistics: Mean 25.250; Variance 37.287; scale 0.677  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.  SUMMARIES  Result Query No. Score Match Length DB ID Description Pred. No.	9: M1 10 PA 11 11 11 11 11 11 11 11 11 11 11 11 11	**************************************
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116 2 I49555 209 2 B26325 260 2 B26325 260 1 NDBOA 353 2 I67482 360 2 A27638 360 2 A27638 360 2 A28639 449 2 A48939 575 2 C269637 905 2 A27410 925 2 A27410 925 2 A39216 156 2 S67248 178 2 F69804 187 2 D42465 187 2 D42465 187 2 D42465 188 2 I78393 408 2 I78395 441 2 I78395 506 1 P1WLB4	-0000-00-000		000000000000000000000000000000000000000
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##residues 1-9:
COMMENT This protein :
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##cross-references EMBL:X78306; NID:g463253; PID:g463254
IFICATION #superfamily beta-thromboglobulin
(Y #length 101 #molecular-waint ''''
                                                                                                             Match 94.1%;
Local Similarity 83.3%;
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protein is a polymorphonuclear leukocyles
d is involved in the host defense function.
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50.5
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#superfamily beta-thromboglobulin
#length 95 #molecular-weight 10611
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llarity 83.3%;
Conservative
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Cloning of a canine gene
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19-May-1994 #sequence_revision 19-May-1994 #text_change
12-Apr-1995
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Suzuki, K.
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                                                                                                     Conservative
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##residues 1-103 ##label LIN
##cross-references GB:M86923; NID:g164520; P:
CLASSIFICATION #superfamily beta-thromboglobulin
SUMMARY #length 103 #molecular-weight 110
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alveolar macrophage chemotactic factor-I (AMCF-I)
interleukin-8 homolog - pig
formal_name Sus scrofa domestica #common_name domestic pig
30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change
23_Feb-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lin, G.; Pearson, A.E.; Scamurra, R.W.; Zhou, Y.;
M.J.; Weiss, D.J.; Murtaugh, M.P.
J. Blol. Chem. (1994) 269:77-85
Regulation of interleukin-8 expression in porcine macrophages by bacterial lipopolysaccharide.
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#length 101 #molecular-weight 11:
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Goodman, R.B.; Foster, D.C.; Mathewes, S.L.; Osborn, S.G
Kuijper, J.L.; Forstrom, J.W.; Martin, T.R.
Biochemistry (1992) 31:10483-10490
Molecular cloning of porcine alveolar macrophage-derived
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02-Jun-1995 #sequence_revision 02-Jun-1995 #text_change
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#journal Biochem. J. (1990) 271:797-801

#title A novel neutrophil chemoattractant generated during an inflammatory reaction in the rabbit peritoneal cavity in vivo. Purification, partial amino acid sequence and structural relationship to interleukin 8.

#accession S13052
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#title Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and their expression in spleen cells.
#cross-references_MUID:91225489
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##cross-references GB:M57439; NID:g165552; PID:g165553
**NCE $13052
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##molecule_type mRNA
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cytokine
#length 101 #molecular-weight 11402 #checksum
A60299 #type complete monocyte chemoattractant protein 1 precursor - human GDCF-1; glioma-derived monocyte chemotactic factor 1; MCAF; MCP-1; monocyte chemotactic factor 1; monocyte secretory
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Pred. No. 3.85e-07;
2; Mismatches (
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                 #authors Furutani, Y.; Nomura, H.; Notake, M.; Oyamada, Y.; Fukui, Yamada, M.; Larsen, C.G.; Oppenheim, J.J.; Matsushima, I #journal Biochem. Biophys. Recommun. (1989) 159:249-255
#title Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF).
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**cross-references GB:M37719; NID:g187447; PID:g487124
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Adv. Exp. Med. Biol. (1991) 305:47-56
Human monocyte chemoattractant protein-1 (MCP-1).
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FEBS Lett. (1989) 244:487-493
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The human homolog of the JE gene encodes a mono
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#journal Mol. Cell. Blochem. (1993) 126:61-68
#title The expression of monocyte chemotactic protein (MCP-1) in human vascular endothelium in vitro and in vivo.
#cross-references_MUID:94150478
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#title Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel N-terminally processed form.
#cross-references_MUID:90211336
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ye, O.N.; Su, G.F.; Yuan, Y.; Huang, C.F.
Chinese J. Microbiol. Immunol. (1994) 14:29-32
The PCR, cloning and sequencing of human monocyte
Chemoattractant protein-1 (MCP-1) gene.
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#status experimental #label MAT2\,
#modified site pyrrolidone carboxylic acid (Gln) (in
mature form) #status experimental\
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##cross-references GB:M28130; NID:g186367; PID:g186368
##note the authors failed to translate the last thirty-six
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.FICATION #superfamily macrophage inflammatory protein
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monocyte chemoattractant protein-1 precursor - pig
#formal_name Sus scrofa domestica #common_name domestic
30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change
08-Sep-1997
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interleukin-8 precursor - human
beta-thromboglobulin-like protein; fibroblast-derived
neutrophil-activating factor alpha; lung carcinoma-derived
chemotaxin; lymphocyte-derived neutrophil-activating
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Schelt, K.H.
Blochem. Blophys. Res. Commun. (1994) 199:962-968
Porcine luteal cells express monocyte chemoattractant protein-1 (MCP-1): Analysis by polymerase chain reaction
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Genomic structure of the human monocyte-derived neutrophil
chemotactic factor IL-8.
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A37034; JL0041; A32791; S37634; PL0107; A28598; A27488;
A39960; A60401; A60591; S18827; S04216; A60567; A60847;
S15417; S03975; I54560; I55992; I37902; S67519
Matsushima, K.; Morishita, K.; Yoshimura, T.; Lavu, Kobayashi, Y.; Lew, W.; Appella, E.; Kung, H.F.;
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monocyte-derived neutrophil-activating factor
#formal_name Homo sapiens #common_name man
08-Dec-1992 #sequence_revision 08-Dec-1992 #text_change
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Biochem. Biophys. Res. Commun. (1988) 151:883-890 Structure determination of a human lymphocyte derived neutrophil activating peptide (LYNAP).
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J. Exp. Med. (1988) 167:1883-1893

Molecular cloning of a human monocyte-derived neutrophil chemotactic factor (MDNCF) and the induction of MDNCF mRNA
                                                                                                                                                                                                                                                                                                                   Walz, A.; Peveri, P.; Aschauer, H.; Baggiolini, M. Biochem. Biophys. Res. Commun. (1987) 149:755-761 Purification and amino acid seguencing of NAF, a novel neutrophil-activating factor produced by monocytes.
                                                                                         Yoshimura, T.; Matsushima, K.; Tanaka, S.; Robinson, E.A.; Appella, E.; Oppenheim, J.J.; Leonard, E.J. Proc. Natl. Acad. Sci. U.S.A. (1987) 84:9233-9237 Purification of a human monocyte-derived neutrophil
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Mol. Cell. Biol. (1989) 9:1946-1957
Regulation of the mRNA for monocyte-derived
neutrophil-activating peptide in differentiating HL60
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                                          chemotactic factor that has peptide sequence similarity to other host defense cytokines.
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##experimental_source dermal fibroblasts
##note a minor component of this material (15%) includes
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##residues 28-47 ##label VA3
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Car, B.D.; Baggiolini, M.; Walz, A. Biochem. J. (1991) 275:581-584 Formation of neutrophil-activating peptide
                                                                                                                                                                                 Van Damme, J.; Van Beeumen, J.; Opdenakker, G.; Billiau, A. J. Exp. Med. (1988) 167:1364-1376
A novel, NH-2-terminal sequence-characterized human monokine possessing neutrophil chemotactic, skin-reactive, and
                                                                                                                                                                                                                                                                                                                                                                                                                            Yoshimura, T.; Robinson, E.A.; Appella, E.; Matsushima, K.; Showalter, S.D.; Skeel, A.; Leonard, E.J. Mol. Immunol. (1989) 26:87-93
Three forms of monocyte-derived neutrophil chemotactic factor (MDNCF) distinguished by different lengths of the amino-terminal sequence.
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Generation of interleukin-8 by plasmin from AVLPR-interleukin-8, the human fibroblast-derived neutrophil chemotactic factor.
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Opdenakker, G.; Billiau, A.
Eur. J. Immunol. (1989) 19:1189-1194
The chemotactic activity for granulocytes produced by virally infected fibroblasts is identical to monocyte-derived
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IL-1alpha or tumor necrosis factor-alpha stimulate release
three NAP-1/IL-8-related neutrophil chemotactic proteins
human dermal fibroblasts.
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the forms starting from positions 21, 23, and
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##residues 28-99 ##label CAR
                                                                                                                                                                                                                                                                                      ##residues 1-101 ##label RES ##cross-references GB:L04986; NID:g459764; PID:g459765
                                                                                                                                                                                                                                                                                                                        ##molecule_type DNA
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                                                                                                                                                               Local Similarity 75.0%;
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Local Similarity 75.0%;
les 9; Conservative
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Immunol. Lett. (1990) 24:165-170
Coding region structure of interleukin-8 gene of human lung
giant cell carcinoma LU65C cells that produce
LUCT_interliukin-8: homogeneity in interleuki-8 genes.
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                                                                                                                                                                                                                                                                                                                                                                                                             Yoshimura, T.; Johnson, D.G.
J. Immunol. (1993) 151:6225-6236
cDNA cloning and expression of guinea pig neutrophil
attractant protein-1 (NAP-1): NAP-1 is highly conserved in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        148148 #type complete
Neutrophil attractant protein-1 - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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by different tissue proteinases.
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#type complete
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Pred. No. 7.74e-06
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Pred. No. 7.74e-06;
3; Mismatches (
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Best Local Similarity 83.3%;
Matches 10; Conservative
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Best Local Similarity 83.3%;
Matches 10; Conservative
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#accession A39296
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##residues 50-68, 'X', 70-74, 'X', 76 ##label WE2
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##residues 1-99 ##label WEM
##residues GB:M84602; GB:M85264; NID:g163394; PID:g163395
##cession B39296
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##residues 1-99 ##label WEM
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26/1; 65/2
*superfamily macrophage inflammatory protein
*length 99 *molecular-weight 11114 *checksum
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JC2336
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monocyte chemoattractant protein-1 - bovine
#formal_name Bos primigenius indicus #common_name zebu (
20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
03-May-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wempe, F.; Kuhlmann, J.K.; Scheit, K.H.
Biochem. Biophys. Res. Commun. (1994) 202:1272-1279.
Characterization of the bovine monocyte chemoattractant
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03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change
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146857  #type complete
monocyte chemoattractant protein-1 - rabbit
                          146857
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product monocyte chemoattractant protein 1 #status
predicted #label MAT\
#binding_site carbohydrate (Asn) (covalent) #status
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Pred. No. 1.27e-05;
1; Mismatches 1
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Pred. No. 1.27e-05;
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                                                                      ##molecule_type mRNA
##residues 1-109 ##label MIN
##cross-references EMBL:X71087; NID:g288396; PID:g288397
##CT This protein induces proteinase secretion and chemotaxis
                                                                                                                                                                                                                                                                                                ##residues
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ne GDB:SCYA7; SCYA6; MCP-3
##Cross-references GDB:138473; OMIM:158106
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Local Similarity 90.9%;
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                                                                                                                                                            Minty, A.; Chalon, P.; Guillemot, J.C.; Kaghad, M.; Liauzun, P.; Magazin, M.; Miloux, B.; Minty, C.; Ramond, P.; Vita, N.; Lupker, J.; Shire, D.; Ferrara, P.; Caput, D. submitted to the EMBL Data Library, March 1993
Molecular cloning of MCP-3: a human monocyte-derived monocyt chemoattractant protein.
                                                                                                                                                                                                                                                                                                                                                       Biochem. Biophys. Res. Commun. (1993) 191:535-542
Human monocyte chemotactic protein-3 (MCP-3): Molecular
cloning of the cDNA and comparison with other chemoki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Opdenakker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; Laureys, G.; Van Damme, J. Genomics (1994) 21:403-408
The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome 17g11.2-g12.
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monocyte chemotactic protein 3 precursor -
monocyte chemotatractant protein MCP-3
#formal_name Homo sapiens #common_name man
28-Oct-1994 #sequence_revision 28-Oct-1994
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J. Immunol. (1991) 146:3483-3488
Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and expression in spleen cells.
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A54678
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                                                                    #journal J. Immunol. (1993) 150:5025-5032

#title cDNA cloning of guinea pig monocyte chemoattractant protein-1
and expression of the recombinant protein.
#cross-references MUID:93267104

#accession 148147
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##residues 1-99 ##label HOS
##experimental_source corpus luteum
##residues 1-120 ##label
##cross-references GB:L04985;
                                 ##molecule_type mRNA
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Similarity 83.3%;
10; Conservative
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monocyte chemoattractant protein-1 - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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monocyte chemoattractant protein-2 - pig
#formal name Sus scrofa domestica #common_name
24-Feb-1995 #sequence_revision 24-Feb-1995 #tex
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Scheit, K.H.

Biochem. Biophys. Res. Commun. (1994) 205:148-153

Borcine lutteal cells express monocyte chemoattractant

protein-2 (MCP-2): Analysis by cDNA cloning and northern
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Pred. No. 8.91e-05;
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Pred. No. 3.37e-05;
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##cross-references EMBL:275668; NID:g1531982; PID:e251275; PID:g1531983
##experimental_source dermal fibroblast
This protein has eosinophil specific chemotatic activity.
                                                                                ##residues 1-89 ##label NAG pID:dl005177; PID:g468457
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Similarity 75.0%;
9; Conservative
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Honjo, T.
Science (1993) 261:600-603
Signal sequence trap: a cl
                                                Tashiro, K.; Tada, H.; Heilker,
                                                                                                                                                                           Nagasawa, T.; Kikutani, H.; Kishimoto, T. Proc. Natl. Acad. Sci. U.S.A. (1994) 91:2305-2309 Molecular cloning and structure of a pre-B-cell
                                                                                                                                                                                                                                                                                 pre-B-cell growth-stimulating factor precursor - mouse #formal_name Mus musculus #common_name house mouse 02-Jun-1994 #sequence_revision 02-Jun-1994 #text_change
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Biochem. Biophys. Res. Commun. (1996) 225:1045-1051
Human dermal fibroblasts express eotaxin: Molecular cloning, mRNA, expression, and identification of eotaxin sequence
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#title
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Exp. Cell Res. (1994) 215:284-293

#title Molecular cloning of TPAR1, a gene whose expression is repressed by the tumor promoter 12-0-tetradecanoylphorbol 13-acetate (TPA).

#cross-references MUID:95073497
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#cross-references MUID:93342488
#accession I59582
                                                            #accession
                                                                          #cross-references
                                                                                                                                                  #authors
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##residues 1-89 ##label F
##cross-references GB:L12029;
            ##molecule_type mRNA
##residues 1-93 ##label RES
                                         ##status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ##residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ##molecule_type mRNA
##cross-references GB:L12030;
                                                                                                                                                                                                                                                                                                                                                                          y Match 77.2%;
Local Similarity 58.3%;
hes 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ##cross-references GB:S74318; NID:g786393; PID:g786394
                                                                                                                                                                                                                                                                                                                                            69 QVCIDPKLKWIQ 80
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Similarity 58.3%;
                                                                       Honjo, T.
Science (1993) 261:600-603
Signal sequence trap: a cloning strategy
proteins and type I membrane proteins.
nces_MUID:93342488
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cytokine
#length 89 #molecular-weight 10032 #checksum
                                                                                                                                                                                            Cytokine - mouse
#formal_name Mus musculus #common_name house mouse
02-Aug-1996 #sequence_revision 02-Aug-1996 #text_ci
28-Feb-1997
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interleukin-8 homolog - mouse
#formal_name Mus sp. #common_name mouse
02-Aug-1996 #sequence_revision 02-Aug-1996
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Pred. No. 3.76e-04;
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Pred. No. 3.76e-04;
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NID:g393181; PID:g393182
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                                            GB/EMBL/DDBJ
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Best Local Similarity 58.3%;
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#title Constitutive and allergen-induced expression
#toross-references MUID:95173589
#accession 148099
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##cross-references EMBL:U18941; NID:g687655; PID:g687656
#FICATION #superfamily macrophage inflammatory protein
# #length 96 #molecular-weight 10753 #checksum
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##residues 1-93 ##label
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JC2478
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cytokine SDF-1-beta - human
#formal_name Homo sapiens #common_name man
21-Dec-1996 #sequence_revision 06-Jun-1997
17-Jul-1998
                                                                                                                                                                                                                                                                                                                                                                                                                  eotaxin precursor - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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.larity 58.3%;
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#length 93
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larity 81.8%;
Conservative
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Pred. No. 6.04e-04;
0; Mismatches 2;
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Pred. No. 3.76e-04
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Pred. No. 3.76e-04;
4; Mismatches 1;
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Best Local Similarity 66.7%;
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#cross-references_MUID:95298037
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##residues 1-92 ##label RES
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WT This protein is identified as a potent eosinophil c
FICATION #superfamily macrophage inflammatory protein
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##residues 1-96 ##label JOS
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Local Similarity 81.8%;
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#type complete
monocyte chemotactic protein-2 - human
#formal_name Homo sapiens #common_name man
02-May-1997 #sequence_revision 18-Jul-1997 #tv
31-0ct-1997
JC5295
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Biochem. Biophys. Res. Commun. (1994) 205:788-794
Eotaxin: Cloning of an eosinophil chemoattractant cytokine and increased mRNA expression in allergen-challenged guinea-pig lungs.
JC2478
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       152322 #type complete
macrophage inflammatory protein-lalpha - rat
#formal_name Rattus norvegicus #common_name Norway rat
29-May-1998 #sequence_revision 29-May-1998 #text_change
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JC2478
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21-Feb-1995 #sequence_revision 05-Apr-1995 #text_change
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#binding_site carbohydrate (Thr) (covalent) #status
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Pred. No. 9.69e-04;
2; Mismatches 2
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##cross-references GB:Y10802, ID:e294088; PID:g1924938
##scross-references GB:Y10802, ID:g1924937; PID:e294088; PID:g1924938
##experimental_source bone marrow
This protein belongs to the beta-chemokine family which is one of
the major HIV-suppressive factors. It plays roles in autoimmune
processes such as multiple sclerosis and rheumatoid arthritis and
in tumor biology, and contribute to the trafficking and
recuitment of the responsive cells.
                                                                                                                                                                                                                                                                                                                                                                  ##cross-references GB:J02975; NID:g212643; PID:g212644

IFICATION #superfamily beta-thromboglobulin

#length 103 #molecular-weight 11090 #chec
                                                                                                                                                                                                                                                                                                                                                                                                                                 ##residues
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                                                                                                                                                                                                                                                                                                          Watch 73.3%;
Local Similarity 66.7%;
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Local Similarity 58.3%;
                                                                                                                                                                                                                                              74 EVCLDPTAPWVQ 85
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Proc. Natl. Acad. Sci. U.S.A. (1987) 84:6715-6719
Constitutive expression of a gene encoding a polypeptide homologous to biologically active human platelet prote. Rous sarcoma virus-transformed fibroblasts virus transformed fibroblasts.
                 #formal_name Gallus gallus #common_name chicken 19-Nov-1988 #sequence_revision 19-Nov-1988 #tex 20-Mar-1998
                                                                                               A26736 #type complete transformation-induced pro
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RSV-Induced protein - chicken
#formal_name Gallus gallus #common_name chicken
13.Sep-1996 #sequence_revision 13-Sep-1996 #text_change
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th 99 #molecular-weight 11246 #checksum
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Pred. No. 2.47e-03;
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Pred. No. 1.55e-03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                         #title cloning and expression of JE, a gene inducible by platelet-derived growth factor and whose product ecross-references MUID:88234501 #molecule +---
                                                Query Match
Best Local
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*Bauthors Sugano, S.; Stoeckle, M.Y.; Hanafusa, H.

*#authors Sugano, S.; Stoeckle, M.Y.; Hanafusa, H.

*#authors Cell (1987) 49:321-328

*#title Transformation by Rous sarcoma virus induces a novel

**with homology to a mitogenic platelet protein.

**cross-references MUID:87187628

**accession A26736
                                                                                                                                                                                                                #gene
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##residues 1-148 ##label
##cross-references GB:J04467;
                                                                                                                                                                                                                                                                                                                                                                                                               ##residues 1-103 ##label SUG
##cross-references GB:M16199; NID:g211735; P:
#FICATION #superfamily beta-thromboglobulin
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73 EVCADPKKEWVQ 84
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Local Similarity 66.7%;
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                                                                                                                                                         JE
26/1, 65/2
#superfamily macrophage
#superfamily macrophage
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                                                                                                                                                                                                                                                                                                                                Platelet-derived growth factor-inducible gene JE is a membo of a family of small inducible genes related to platelet
                                                                                                                                                                                                                                                                                                                                                                 Kawahara, R.S.; Deuel, T.F. J. Biol. Chem. (1989) 264:679-682
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PDGF-inducible JE glycoprotein precursor - mouse
#formal_name Mus musculus #common_name house mouse
01-Dec-1989 #sequence_revision 01-Dec-1989 #text_change
                                                                                              predicted #length 148 #mo
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#product transformation induced protein #status
predicted #label MAT
gth 103 #molecular-weight 11056 #checksum 8297
                                                                                                                               #binding_site carbohydrate (Asn)
                                              72.3%;
66.7%;
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                                                                                             #molecular-weight 16326
                             Score 73; DB 2; 1
Pred. No. 3.93e-03
1; Mismatches
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Pred. No. 2.47e-03;
1; Mismatches
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NID:g193488;
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#title
                                                                                                           #authors Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
#journal J. Immunol. (1989) 142:679-687
#title A family of small inducible proteins secreted by leukocytes
are members of a new superfamily that includes leukocyte
and fibroblast-derived inflammatory agents, growth factors,
and indicators of various activation processes.

#cross-references_MUID:89093958
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#accession A32393
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                 ##residues 1-21,'L',23-61,'A',63-92 ##label BRO##cross-references GB:M23447; NID:g533240; PID:g533241
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Cloning and characterization of a cDNA for murine macrophage inflammatory protein (MIP), a novel monokine with inflammatory and chemokinetic properties.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Davatelis, G.; Tekamp-Olson,
Luedke, C.; Gallegos, C.; (
Cerami, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kwon, B.S.; Weissman, S.M.
Proc. Natl. Acad. Sci. U.S.A. (1989) 86:1963-1967
cDNA sequence of two inducible T-cell genes.
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Sequence of the murine haemopoietic stem cell inhibitor/macrophage inflammatory protein 1-alpha
                                                                                                                                                                                                                                                                                                                                                                                            J. Exp. Med. (1989) 170:2189 erratum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Davatelis, (
Luedke, C
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                                                                                          A30552
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the authors translated the codon GAG for residue 49 Asp and ATT for residue 91 as Asn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Asp and ATT for residue 91 as Asn
the sequence has been corrected in reference A53885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1-92 ##label KWO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermsen, K.;
Gallegos, C.; Coit, D.; Merryweather, J.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P.; Wolpe, S.D.; Hermsen, K.; Coit, D.; Merryweather, J.;
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#journal J. Exp. Med. (1988) 167:570-581

#acrophages secrete a novel heparin-binding protein with inflammatory and neutrophil chemokinetic properties.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #title Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta.
                        #cross-references MUID:90174947
#accession S07723
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#accession I56104
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##residues 1-92 ##label RES
##cross-references GB:M73061; NID:g199694; PID:g199695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ##molecule_type protein
##residues 24-33,'XX',36-42 ##label
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##molecule_type DNA
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Local Similarity 58.3%;
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                                                                                                                                                                                                                                 monocyte chemoattractant protein-1 #formal_name Rattus norvegicus #common_name Norway rat 29-Jan-1993 #sequence_revision 29-Jan-1993 #text_change
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J. Immunol. (1991) 146:4031-4040
Genomic structure of murine macrophage inflammatory
protein-1-alpha and conservation of potential regulatory
sequences with a human homolog, LD78.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sherry, B.; Tekamp-Olson, P.; Gallegos, C.; Davatelis, G.; Wolpe, S.D.; Masiarz, F.; (
                                                                                Timmers, H.T.M.; Pronk, G.J.; Bos, J.L.; van der Eb, A.J. Nucleic Acids Res. (1990) 18:23-34
Analysis of the rat JE gene promoter identifies an AP-1 binding site essential for basal expression but not for TPA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   J. Exp. Med. (1988) 168:2251-2259
                                                                                                                                                                         S07723
                                                                                                                                                                                         S07723; JN0128
                                                                                                                                                                                                                                                                                           $07723 #type complete immediate-early serum-responsive protein JE - rat
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                                                                  induction
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#product macrophage inflammatory protein #status
experimental #label MAT
hth 92 #molecular-weight 10345 #checksum 5009
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#authors
#journal
#title
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Search completed: Thu Apr 1 07:35:21 1999 Job time: 17 secs.
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                                                                                                                                                                                     Query Match 68.3%;
Best Local Similarity 66.7%;
Matches 8; Conservative
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#journal Biochem. Biophys. Res. Commun. (1991) 174:504-509
#title Molecular cloning of rat monocyte chemoattractant protein-1
(MCP-1) and its expression in rat spleen cells and tumor
cell lines.
#cross-references MUID:91128376
#accession JN0128
##molecule_type mRNA
##molecule_type mRNA
##roselines_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ##residues 1-148 ##label YOS
##cross-references GB:M57441; NID:9205333; PID:9205334
##cyperimental_source spleen cells
the authors translated the codon GAA for residue 62 as
##note
Lys and GCT for residue 63 as Leu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ##residues
1-148 ##label TIM
##cross-references EMBL:X17053; NID:g55530; PID:g55531
                                                                                         73 EICADPNKEWVQ 84
||| ||: |||
1 EICLDPKQKWVQ 12
                                                                                                                                                                                                                                                                          #domain signal sequence #status predicted #label SIG\
#product immediate-early serum-responsive protein JE
#status predicted #label MAT
#length 148 #molecular-weight 16460 #checksum 4876
                                                                                                                                                                                                                                                                                                                                                                                               26/1; 65/2 **superfamily macrophage inflammatory protein
                                                                                                                                                                                 Score 69; DB 2; Length 148; Pred. No. 2.44e-02; 1; Mismatches 3; Indels
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Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd.

MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Tabular output not generated. on: Thu Apr 1 07:33:48 1999; MasPar time 2.31 Seconds 139.448 Million cell updates/sec

Sequence: Perfect Score: >US-08-927-939-10 (1-12) from US08927939.pep 101 1 EICLDPKQKWVQ 12

Scoring table: PAM 150 Gap 15

Searched: 74019 seqs, 26840295 residues

Post-processing: Minimum Match 0% Listing first 100 summaries

Database: swiss-prot36 1:swissprot

Statistics: Mean 26.088; Variance 33.350; scale 0.782

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Result	Score	ery	Length [	BB	ID	Description	Pred. No.
1	95	94.1	101	i سر	IL8_SHEEP	INTERLEUKIN-8 PRECURSO	2.66e-09
N	95	94.1	101	-	1		.66e-
ω	95	94.1	103		IL8_PIG		
4	92	91.1	101	μ.	IL8_BOVIN		. 51e
, (J	92	91.1	101	1-4	IL8_RABIT		1.51e-08
١٥٠	90	89.1	99	μ,	MCP1_HUMAN	MONOCYTE CHEMOTACTIC P	.74e
. 7	90	89.1	101	Н	MCP1_CANFA	MONOCYTE CHEMOTACTIC P	4.74e-08
. &	89	88.1	99	_	MCP1_PIG		
9	87	86.1	99	Н	MCP2_BOVIN	MONOCYTE CHEMOTACTIC P	
10	86	85.1	98	<b></b>	MCP4_HUMAN	MONOCYTE CHEMOTACTIC P	4.55e-07
11	86		99	<b>ب</b>	IL8_HUMAN	INTERLEUKIN-8 PRECURSO	4.55e-07
12	86	•	101	دسو	IL8_CAVPO	INTERLEUKIN-8 PRECURSO	4.55e-07
13	0 0	84.2	99	<b> </b> 3	MCPA_BOVIN	MONOCYTE CHEMOTACTIC P	7.97e-07
14	20 02	•	125	-	MCP1_RABIT	MONOCYTE CHEMOTACTIC P	1.39e-06
15	83	٠	97	۳	EOTA_MOUSE	EOTAXIN PRECURSOR (EOS	
16	83	٠	97	سم	EOTA_RAT	EOTAXIN PRECURSOR (EOS	
17	83	٠	99	۲	MCP3_HUMAN	н	
128	82	٠	97	Н	EOTA_HUMAN	EOTAXIN PRECURSOR (EOS	
19	82	81.2	101	ب	IL8_CERTO	INTERLEUKIN-8 PRECURSO	4.21e-06
20	82	٠	101	Н	IL8_MACMU	INTERLEUKIN-8 PRECURSO	4.21e-06
21	81	•	99	۳	MCP2_PIG	MONOCYTE CHEMOTACTIC P	. 29e
22	82		120	_	MCP1_CAVPO	MONOCYTE CHEMOTACTIC P	
. 23	79	78.2	104	μ	MCP5_MOUSE	MONOCYTE CHEMOTACTIC P	2.17e-05

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Matches 1
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-!- SUBUNIT: HOMODIMER.
-!- SIMILARITY: BELONGS TO THE IN C-X-C) (CHEMOKINE CXC).
EMBL; X78306; G463254; -
EMBL; X78436; G463254; -
EMBL; X74445; G786591; -
EMBL; X74445; G786591; -
PIR; S42496; S42496.
HSSP; P10145; 3118.
HSSP; P10145; 3118.
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98
99
100
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P41324;
01-FEB-1995
01-FEB-1995
01-NOV-1995
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SEOW H.F., YOSHIMURA T., WOOD F.S.,
IMMUNOL. CELL BIOL. 72:398-405(1994).

-I- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-I- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
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P36925;
01-JUN-1994
01-JUN-1994
01-NOV-1995
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DISULFID
SEQUENCE
SEQUENCE FROM N.A.
MEDLINE; 94010328.
ISHIKAWA J., SUZUKI S.,
GENE 131:305-306(1993).
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GENE 150:367-369(1994).
                                                                                                                                                                         CANIS FAMILIARIS (DOG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE; 95137691.
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                                                                                                                                                 EUTHERIA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E; CHEMOTAXIS; INFLAMMATORY RESPONSE; S: CHEMOTAXIS; INFLAMMATORY RESPONSE; S: 1 2 BY SIMILARITY. 2 BY SIMILARITY. 2 BY SIMILARITY. 3 101 INTERLEUKIN-8 BY SIMILARITY. 5 BY SIMILARITY. 5 BY SIMILARITY. 5 BY SIMILARITY. 5 101 AA; 11292 MW; 5A574527 CRC32;
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Similarity 83.38;
10; Conservative
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                                                                                                                                                 CARNIVORA.
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5 (REL. 31, LAST SEQUE
5 (REL. 32, LAST ANNOT
N-8 PRECURSOR (IL-8).
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1A12_LYCES
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MEM2_RAT
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Pred. No. 2.66e-09;
2; Mismatches 0
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                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                         VERTEBRATA;
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                             HIROTA
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1-AMINOCYCLOPROPANE-1-
NUMB PROTEIN.
MEMBRANE-ASSOCIATED PR
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C. C. FUNCTION: II-8 15 A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,

CC. BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN

CC. BASOPHILA ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN

CC. PERFONSE TO AN INFLAMMATORY STIMULUS.

CC. I- SUBUNIT: HOMODIMER.

CC. I- SUBUNIT: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE

CC. SUBUNIT: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE

CC. SUBUNIT: GA75152; --

DR EMBL; D14285; G475152; --

DR EMBL; U10308; G607814; --

DR EMBL; U10308; G607814; --

DR EMBL; CLORDANIS; INFLAMMATORY RESPONSE; SIGNAL.

KW CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHAIN
DISULFID
DISULFID
SEQUENCE
  MEDLINE; 93041741.

GOODMAN R.B., FOSTER D.C., MATHEWES FORSTROM J.W., MARTIN T.R.;
BIOCHEMISTRY 31:10483-10490(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IL8_PIG STANDARD; PRT; 103 AA.
P25894; P22951;
01-AUG-1991 (REL. 19, CREATED)
01-AUG-1992 (REL. 23, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8) (ALVEOLAR MACKOPHAGE CHEMOTACTIC FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MATSUMOTO Y., MOHAMED A., ONODERA T., KATO H., OHASHI T.,
GOITSUKA R., TSUJIMOTO H., HASEGAWA A., FURUSAWA S., YOSHIHARA K.,
ISHIKAWA J., HOTTA K., SUZUKI K., HIROTA Y.;
CYTOKINE 6:455-461(1994).
                                                                                                                                                                                                    SEQUENCE FROM N.A. SANJANWALA M.;
                                                                                                                                                                                                                                                                                          MEDLINE; 94103307.
LIN G., PEARSON A.E., SCI
WEISS D.J., MURTAUGH M.P
                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. MEDLINE; 94103307.
                                                                                                                                                                                                                                                                                                                                                                                                        SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHC
EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 95114148.
KUKIELKA G.L., SMITH W.C.,
MENDOZA L.H., DALY T.J., H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A STRAIN-MONGREL; T:
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MEDLINE; 95127913.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      [2]
SEQUENCE FROM N.A.
BIOCHEMISTRY [4]
                                                                                                             TISSUE-LUNG;
                                                                                                                                SEQUENCE FROM N.A.,
                                                                                                                                                                               SUBMITTED (JUL-1991)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            75 EVCLDPKEKWVQ
                                                                                                                                                                                                                                                                       BIOL. CHEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 EICLDPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (AMCF-I).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3643
                                                                                                                                                                                                                                                                       269:77-85(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE-JUGULAR VEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12
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83.3%;
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61
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                                                                                                                                SEQUENCE
                                                                                                                                                                            EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WW;
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2; 1
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INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                               VERTEBRATA;
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B.J., YOUKER K.A., F
                                                                                                                                OF.
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No. 2.66e-09
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                                                                                                                                                                               DATA
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                                                                                                                                                                                                                                                                                                                                                                                                                               TETRAPODA; MAMMALIA;
                                                                 OSBORN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length• 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                    BAARSCH M.J.,
                                                                                                                                                                               BANKS
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G:
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                                                                 KUIJPER
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Best Local
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EMBL; X61151; G516197; -.

EMBL; M99367; G1235612; -.

PIR; A44253; A44253;

PIR; A39819; A39819.
                                                                    CAMPOS M., BABIUK L.A.;

CAMPOS M., BABIUK L.A.;

HICROB. PATHOG. 20:203-212(1996).

II FUNCTION: II-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,

BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN

NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN

RESPONSE TO AN INFLAMMATORY STIMULUS (BY SIMILARITY).

I-1 SUBUNIT: HOMODIMER (BY SIMILARITY).

-1- SUBUNIT: HOMODIMER (BY SIMILARITY).

-1- SUBUNIT: HOMODIMER (BY SIMILARITY).

-1- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE CYC.) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DISULFID
DISULFID
CONFLICT
CONFLICT
                 CYTOKINE;
SIGNAL
CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GOODMAN R. SUBMITTED
                                                     PROSITE; PS00471; SMALL_C
                                                                                                                                                                                                                                                                                                                                IL8_BOV
P79255;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GOOMMAN R.B., FORSTROM J.W., OSBORN S.G., CHI E.Y., J. BIOL. CHEM. 266:8455-8463(1991).

-i- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTI BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS RELEASED FROM SEVER NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVER NEUTROPHIL ACTIVATION.
                                                                                                                                                                                       MORSEY
                                                                                                                                                                                              SEQUENCE FROM N.A. MEDLINE; 96304552.
                                                                                                                                                                                                                                               BOS TAURUS EUKARYOTA;
      DISULFID
                                                    PROSITE;
                                                                                                                                                                                                                                     EUTHERIA; ARTIODACTYLA
                                                                                                                                                                                                                                                                                  INTERLEUKIN-8
                                                                                                                                                                                                                                                                                              01-NOV-1997
01-NOV-1997
                                                                                                                                                                                                                                                                                                                      01-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                       75 EVCLDPKEKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
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SIMILARITY: BELONGS TO THE INTERC
C-X-C) (CHEMOXINE CXC).
                                                                                                                                                                                                                                                                                                                                            BOVIN
                                                                                                                                                                                                                                                                                                                                                                                           EICLDPKQKWVQ 12
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TE; PS00471; SMALL_CYTOKINES_CXC;
INE; CHEMOTAXIS; INFLAMMATORY RES
                                                                                                                                                                                   м. А.,
                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
10; Conse
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                                          CHEMOTAXIS;
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                                                                                                                                                                                                                                               (BOVINE).
METAZOA; CHORDATA;
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26
34
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33
37
103
                                                                                                                                                                                                                                                                                             (REL.
(REL.
                                                                                                                                                                                  POPOWYCH Y., KOWALSKI J.,
       23
34
                                                                                                                                                                                                                                                                            REL. 35, LAST SEQUENCE UE REL. 35, LAST ANNOTATION PRECURSOR (IL-8).
                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AA;
                                                                                                                                                                                                                                                                                                                                            STANDARD;
; SMALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                                                                                                                             2,2,2,2
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103
61
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                                                                                                                                                                                                                                                                                                                      CREATED)
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred.
2; 1
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BY SIMILARITY.
RC -> CR (IN REF. 5).
K -> KK (IN REF. 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 95;
                                                                                                                                                                                                                                               VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                           PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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                                                                                                                                                                                                                                                                                                          UPDATE)
                                                                                                                                                                                                                                                                                                                                           101 AA
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                                                                                                                                                                                    GERLACH
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                                                                                                                                                                                                                                               TETRAPODA;
                                         SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 103;
                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                   G.,
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                                                                                                                                                                                   GODSON
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                                                                                                                                                                                                                                               MAMMALIA;
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Matches 1
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Best Local s
Matches
                                                                                             MCP1_HUMAN
P13500;
                                                                                                                                                                                                                                                                                                                                                          DISULFID
DISULFID
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; M57439; PIR; S13052; S13052.
HSSP; P10145; 3IL8.
PROCETE; PS00471; SMALL_CYTOKINES_CXC; 1.
PROCETE; PS00471; SMALL_CYTOKINES_CXC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DISULFID SEQUENCE
            01-JAN-1990 (REL. 13, CREATED)
01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOTACTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IL8_RABIT
P19874;
                                                                                                                                                                                                                                                                                                                                                                                                                                  CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-FEB-1991 (REL. 17, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8) (NEUTROPHIL ATTRACTANT/ACTIVATION
PROTEIN-1) (NAP-1) (PERMEABILITY FACTOR 1) (RPF1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-NEW ZEALAND WHITE; TISSUE-PERITONEAL CAVITY; MEDLINE; 91058518.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-NEW ZEALAND WHITE;
MEDLINE; 91225489.
YOSHIMURA T., YUHKI N.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORYCTOLAGUS CUNICULUS (RABBIT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
AND ACTIVATING FACTOR) (MCAF) (MONOCYTE SECRETORY PROTEIN JE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IL8.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EUTHERIA; LAGOMORPHA.
                                                                                                                                                                                                                                        75
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101 AA;
                                                                                                                                                                                                                                                                                                                                                            101 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               146:3483-3488(1991)
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34
4
50
                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                    STANDARD;
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101
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11402
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75.0%;
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11291 MW;
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83.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 92; DB 1; I
Pred. No. 1.51e-08;
3; Mismatches (
                                                                                                                                                                                                                                                                           Score 92; DB 1; I
Pred. No. 1.51e-08;
2; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                          BY SIMILARITY.
BY SIMILARITY.
K -> I (IN REF.
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REPRESENTATION OF THE PRESENTATION OF THE PRES
                                               MEDLINE; 96234959.
HANDEL T.M., DOMAII
BIOCHEMISTRY 35:656
[13]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE; 94150478. LI Y.S., SHYY Y.J., VKOLATTUKUDY P.E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE; 90290466. SHYY Y.J., LI Y.S., BIOCHEM. BIOPHYS. RE
                                                                                                                                                                                                                                                                     MEDLINE; 91312872.
GRONENBORN A.M., CLORE G.M.;
PROTEIN ENG. 4:263-269(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF 24-99.
MEDLINE: 89184525.
ROBINSON E.A., YOSHIMURA T.,
SHABANOWITZ J., HUNT D.F., AI
PROC. NATL. ACAD. SCI. U.S.A
EFFECT OF DELETION OF N-TERMINAL RESIDUES. MEDLINE; 96195223.
                                                                                                                                                                                                           X-RAY CRYSTALLOGRAPHY (1.85 ANGSTROMS). MEDLINE; 97143315.
                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE OF 29-53 AND MEDLINE; 90211336.
DECOCK B., CONINGS R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. MEDLINE; 92095166.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 89165862.
FURUTANI Y., NOMURA H.,
LARSEN C.G., OPPENHEIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YOSHIMURA T., LEONARD ADV. EXP. MED. BIOL. 3
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LEONARD E.J.;
FEBS LETT. 244:487-493(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE; 89153605.
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ROLLINS B.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                 BIOCHEM. BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE; 91207938.
CHANG H.C., HSU F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BIOCHEM. BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HOMO SAPIENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SCYA2 OR MCP1
                                                                                                                                                                                                                                                                                                                                        3D-STRUCTURE MODELLING
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                                                                                                                                                                        STRUCT.
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B.J., STIER
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BIOL. 9:4687-4695(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                244:487-493(1989).
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L. 1:388-399(1989).
                                                              DOMAILLE P.J.;
35:6569-6584(1996).
                                                                                                                                                                        BIOL.
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mazoa; CHORDATA;
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                                                                                                                                                                                                                                                                                                                                                                               RES.
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                                                                                                                                                                 CZ G., DOMAILLE
4:64-69(1997).
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ES. COMMUN. 169:346-351(1990).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ) E.J.;
305:47-56(1991).
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                                                                                                                                                                                                                                                                                                                                                                             LENAERTS J.-P., BILIAU A., COMMUN. 167:904-909(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOORE S.K.,
                                                                                                                                                                                       DOMAILLE P.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ., LEONARD E.J., TANAKI
APPELLA E.;
.A. 86:1850-1854(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERTEBRATA; TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             159:249-255(1989).
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                                                                                                                                                                                         HANDEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Α.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TANAKA S.,
                                                                                                                                                                                       T.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORNHILL
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                                                                                                                                                                                                                                                                                                                                                                                                  VAN DAMME
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                                                                                                                                                                                         WLODAWER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GRIFFIN P.R.,
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RARMER AND ARARMANDO CONCOCO CON CONTRACTOR 
Query Match
Best Local S
Matches 1
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CYTOKINE;
SIGNAL
CHAIN
MOD_RES
DISULFID
DISULFID
CARBOHYD
VARIANT
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MUTAGENESIS.
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PDB;
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EWBL;
EWBL;
EWBL;
EWBL;
EWBL;
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                                                                            SEQUENCE
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FEBS LETT. 395:277-282(1996).
-!- FUNCTION: CHEMOTACTIC FAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 94253189.
ZHANG Y.J., RUTLEDGE B.J., ROLLINS B.J.;
J. BIOL. CHEM. 269:15918-15924(1994).
                                                                                                                                                                                                                                                                                    MUTAGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WEBER M.,
                                                                                                                                 MUTAGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 97053697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EXP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.

PTM: PROCESSING AT THE N-TERMINUS CAN REGULAR RECEPTOR AND TARGET CELL SELECTIVITY. DELETION OF THE AMINO- TERMINAL RESIDUE CONVERTS IT FROM AN ACTIVATOR OF BASOPHIL TO AN EOSINOPHIL CHEMOATTRACTANT. SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATHEROSCLEROSIS.
SUBUNIT: MONOMER OR HOMODIMER;
PTM: PROCESSING AT THE N-TERMII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND BASOPHILS
BUT NOT NEUTROPHILS OR EOSINOPHILS. AUGMENTS MONOCYTE ANTI-TUWOR
ACTIVITY. HAS BEEN IMPLICATED IN THE PATHOGENESIS OF DISEASES
CHARACTERIZED BY MONOCYTIC INFILTRATES, LIKE PSORIASIS, RHEUMATOID
ARTHRITIS OR ATHEROSCLEROSIS. MAY BE INVOLVED IN THE RECRUITMENT
OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1DOM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              M31626; G386961;
M30816; G386961;
M31625; G386961;
M24545; G307163;
Similarity 91.7%;
11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MED.
                                                                                                                                                                                                                                                                                                                                                                                                                                     PS00472; SMAI; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (CHEMOKINE CC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           UGUCCIONI M., BAGGIOLINI M., CLARK-LEWIS I., DAHINDEN C.A.;
ED. 183:681-685(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-OCT-94.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G338009;
G34514;
G3487124;
G338007;
G338007;
G338007;
G545465;
G240868;
                                                                                                SMALL_CYTOKINES_CC; 1.
XIS; SIGNAL; INFLAMMATORY RESPONSE;
                   89.1%;
91.7%;
                                                                            11025 MW;
                                                                                                                 55542263245752493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOINED.
                                                                                                    MISSING: LOSS OF ACTIVITY.

MISSING: LOSS OF ACTIVITY.

MISSING: 90% REDUCTION IN ACTIVITY.

MISSING: 90% REDUCTION IN ACTIVITY.

MISSING: 83% REDUCTION IN ACTIVITY.

D->A: 90% REDUCTION IN ACTIVITY.

N->A: 50% REDUCTION IN ACTIVITY.

S->Q: 40% REDUCTION IN ACTIVITY.

Y->D: LOSS OF ACTIVITY.

R->L: LOSS OF ACTIVITY.

R->L: LOSS OF ACTIVITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLARK-LEWIS I.,
                 Score
Pred.
0;
                                                                                                                                                                                                                                                                                                                                                                              PYRROLIDONE
                                                                                                                                                                                                                                                                                                                       POTENTIAL.
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Mismatches
                                 90;
                   90; DB 1; I
No. 4.74e-08;
                                                                            CRC32;
                                                                                            REDUCTION
                                                                                                                                                                                                                                                                                                                                                                              CARBOXYLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SYKES B.D.;
                                 Length 99;
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Indels
                                                                                            ACTIVITY
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Best Local S
Matches 1
                       SEQUENCE FROM N.A.
MEDLINE; 94183284.
HOSANG K., KNOKE I.,
BIOCHEM. BIOPHYS. RES
                                                                                                                                                                        MCP1_PIG
P42831;
01-NOV-1995
                                                                                                                                                                                                                                                                                                                                                DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                CHAIN
MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KUMAR A.G., BALLANTYNE C.M., MICHAEL L.H., KUKIELKA G.L., YOUKER K.A LINDSEY M.L., HAWKINS H.K., BIRDSALL H.H., MACKAY C.R., LAROSA G.J., ROSSEN R.D., SMITH C.W., ENTMAN M.L.; CIRCULATION 95:693-700(1997).

-1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS. IMPORTANT FACTOR IN THE COURSE OF THE INFLAMMATORY FREACTION TO REPERFUSION OF THE PREVIOUSLY ISCHEMIC MYOCARDIUM. MAY PLAY A SIGNIFICANT ROLE IN MONOCYTE TRAFFICKING INTO THE REPERFUSED MYOCARDIUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            + + +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCYA2 OR MCP1.
CANIS FAMILIARIS (DOG)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
                                                                                               EUKARYOTA;
                                                                                                           SCYA2.
SUS SCROFA (PIG)
                                                                                                                                   01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP
                                                                                                                                               01-NOV-1995 (REL.
01-NOV-1995 (REL.
15-JUL-1998 (REL.
                                                                                                                                                                                                                                                                                                                                                                                                                        SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; U29653;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <del>:</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE-JUGULAR VEIN ENDOTHELIAL; MEDLINE; 97176620.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHEMOATTRACTANT PROTEIN-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MCP1
SEQUENCE FROM N.A.
                                                                                      EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                    CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EUTHERIA; CARNIVORA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE;
                                                                                                                                                                                                                                                                       73 EICADPKQKWVQ 84
                                                                                                                                                                                                                                                                                               Match 89.1%;
Local Similarity 91.7%;
les 11; Conservative
                                                                                                                                                                                                                                                 1 EICLDPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
INDUCTION: BY TNF-ALPHA.
TISSUE SPECIFICITY: ENDOTHELIUM OF SMALL VEINS AND INTRAFASCICULAR
VEINS, AND INFILTRATING LEUKOCYTES.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CANFA
                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                         PS00472; SMALL_CYTOKINES_CC; 1.
; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE.

1 23 BY SIMILARITY.
24 101 MONOCYTE CHEMOTACTIC PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CHEMOKINE CC).
                                                                                    METAZOA; CHC
ARTIODACTYLA.
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                                                                                                                                                                                                STANDARD;
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                         RES.
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24
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                                                                                                 CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                59
75
                                                                                                                                                                                                                                                                                                                                                 11121
                                   KLAUDINY J
                                                                                                                                    PROTEIN 1 PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                                                                 WW;
                                                                                                                                                                                                                                                                                               Pred.
                                                                                                                                                                                                                                                                                                                        Score
                                                                                                                                                                                                                                                                                                                                            PYRROLIDONE CARBOXYLIC ACID SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
; A7075B14 CRC32;
                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                VERTEBRATA; TETRAPODA;
                       ), WEMPE F., WUTTKE W., 199:962-968(1994).
                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                           ŏ.
                                                                                                                                                                                                                                                                                                                     90;
                                                                                                                                                                                                                                                                                            ; DB 1; Leuy
, 4.74e-08;
---hes 1;
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                                                                                                                                                                                                                                                                                                                     Length 101;
                                                                                                                                                                                                                                                                                                                                                                                                PROTEIN 1.
IC ACID (BY
                                                                                                                                                                                                                                                                                               Indels
                                                                                                 MAMMALIA
                                   SCHEIT
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                                   K.H.;
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Best Local S
Matches 1
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                                                                              Matches
                                                                                                                                                                           DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SCYA8 OR MC
BOS TAURUS
EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MCP2_BOVIN STANDARD; PRT; YY AA.

(09141;
01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID DISULFID
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CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-BRAIN;
ZACH O.R.F.;
SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,
                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                        WEMPE F., HANES J., SCHEIT K.H.;

DNA CELL BIOL. 13:1-8(1994).

- I- FUNCTION: CHARMOTACTIC FACTOR THAT ATTRACTS MONOCYTES.

- CAN BIND HEPARIN.

- I- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILIFICATIVE): BELONGS TO THE INTERCRINE BETA FAMILY (SMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; Z48479; G683717; -.
EMBL; X79416; G872313; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                               SIGNAL
                                                                                                                                                                                                                                                                                                                                        EMBL; S67954; E118856; EMBL; S67956; G544997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NEUTROPHILS.
-!- SUBUNIT: MONOMER OR
-!- SIMILARITY: BELONGS
                                                                                                                                                                                                                                       MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE; 94114084.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                                                                                                   CYTOKINE;
                                                                                                                                                                                                                                                                                                                        ROSITE;
                                       73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73 EICAEPKQKWVQ
                                                                            Local Similarity es 9; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 EICLDPKQKWVQ 12
\vdash
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EICLDPKQKWVQ
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                                                                                                                                                                                                                                                                                                                    PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                          (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                   CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (BOVINE).
METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                             99
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                                                                              Conservative
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                                                                                                                                                           10900 MW;
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75.0%;
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                                                                                                                                                                                                                                                                                                 SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY)
TO THE INTERCRINE BETA FAMILY (SMALL CYTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY)
TO THE INTERCRINE BETA FAMILY (SMALL CYTO
                                                                            Pred.
2; 1
                                                                                                                 Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 89; DB 1; I
Pred. No. 8.37e-08;
1; Mismatches 1
                                                                                                                                                                           BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                   PYRROLIDONE CARBOXYLIC SIMILARITY).
                                                                                                                                                                                                                                                        HEPARIN-BINDING; INFLAMMATOR
BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BY SIMILARITY.
BY SIMILARITY.
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INFLAMMATORY RESPONSE
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ECC3AFB4 CRC32;
                                                                                                                                                           9BA2CD26 CRC32;
                                                                              Mismatches
                                                                                                                 87;
                                                                                               No. 2.60e-07;
                                                                                                                 DB 1;
                                                                        1;
                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                 INFLAMMATORY RESPONSE
                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (SMALL CYTOKINE
                                                                                                                                                                                                                                     N 2.
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RESULT

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A PER STANDARD CONTROL CONTROL
   Query Match
                                                          CYTOKINE;
SIGNAL
CHAIN
MOD_RES
DISULFID
DISULFID
CARBOHYD
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

-I- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES BASOPHILS AND EOSINOPHILS, BUT NOT NEUTROPHILS. SIGNALS THROUGH CCR2B AND CCR3 RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF LEUKOCYTES AT BOTH SIDES OF ALLERGIC AND NONALLERGIC INFLAMMATION.

MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF ARTHEROSCLEROSIS. MAY PLAY A ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED.

1- MASS SPECTROMETRY: MOLOTIC MASS SPECTROMETRY MASS SPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE: 97113354.
GARCIA-ZEPEDA E.A., COMBADIERE C., LAVIGNE F., HAMID Q., MURPHY P.M., J. IMMUNOL. 157:5613-5626(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 97341179.

BERKHOUT T.A., SARAU H.M., MOORES K., WHITE J.R., ELSHOURBAGY N., APPELBAUM E., REAPE T.J., BRAWNER M., MAKWANA J., FOLEY J.J., APPELBAUM E., REAPE T.J., MACNULTY D., MATTHEWS J., O'DONNELL K., O'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPHEE C.;

J. BIOL. CHEM. 272:16404-16413(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      UGUCCIONI M., LOETSCHER P., FORSSMANN LI Y., KREIDER B., GAROTTA G., THELEN J. EXP. MED. 183:2379-2384(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHEMOATTRACTANT PROTEIN 4) (CK-BETA10) SCYA13 OR MCP4 OR NCC1.
                                                                                                                                                                                                                                                                                                                    PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            -!- MASS SPECTROMETRY: MW-9314; MW_ERR-30; METHOD-MALDI; RAN
!- MASS SPECTROMETRY: MW-8750; MW_ERR-30; METHOD-MALDI; RAN
!- MASS SPECTROMETRY: MW-8575; MW_ERR-30; METHOD-MALDI; RAN
!- INDUCTION: BY INTERLEUKIN-1 AND TNF-ALPHA.
!- ITSSUE SPECIFICITY: WIDELY EXPRESSED. FOUND IN SMALL INT
THYMUS, COLON, LUNG, TRACHEA, STOMACH AND LYMPH NODE. LO
SEEN IN THE PULMONARY ARTERY SMOOTH MUSCLE CELLS.
!- THIS PROTEIN CAN BIND HEPARIN.
!- STHIS PROTEIN CAN BIND HEPARIN.
!- ONE MAJOR ISOFORM MCD-4, AND TWO MINOR ISOFORMS (LA
[FNPGGLA)MCD-4 ARE PRODUCED BY DIFFERENTIAL SIGNAL CLEAV
(LA)MCD-4 IS ABOUT 30 FOLD LESS ACTIVE THAN MCD-4.

SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       - -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE; 96235049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; C
                                                                                                                                                                                                                                                                                                                                                                           -C) (CHEMOKINE CC).
U46767; G1732123; -.
AC002482; G2340091;
                                                                                                                                                                                                                                                                                                                    PS00472;
                                                                                                                                                                                                                                                                                      CHEMOTAXIS;
                                                                98
                                                                                                 24
24
29
                                                                                                                                                                                                                                                                                                                    SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AND
                                                                10986
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                                                                                                    23
58
74
29
   85.1%;
                                                                                                                                                                                                                                                                                SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
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                                                                W.
   Score
                                                                                                                 PYRROLIDONE CARBOXYLIC ACID BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                         MONOCYTE CHEMOTACTIC
                                                                                              POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERTEBRATA;
                                                             DF52F6EC
                                                                                                                                                                                                                                                                                GLYCOPROTEIN;
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   86;
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LUSTER A.D.
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                                                             CRC32;
DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEWALD B.,
BAGGIOLINI
                                                                                                                                                                                                                                                                                INFLAMMATORY RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
≅.,
Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R ISOFORMS (LA)MCP-4 AND
L SIGNAL CLEAVAGE.
N MCP-4.
FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SARAFI M.N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          M L
98;
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RANGE=22-98
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P10145;

P10145;

01-MAR-1989 (REL. 10, CREATED)

01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)

15-UUL-1998 (REL. 36, LAST SEQUENCE UPDATE)

15-UUL-1998 (REL. 36, LAST ANNOTATION UPDATE)

INTERLEWIN-8 PRECURSOR (IL-8) (MONOCYTE-DERIVED NEUTROPHIL CHEMOTACTIC FACTOR) (NEUTROPHIL-ACTIVATING PROTEIN 1) (NAP-1) (LYMPHOCYTE-DERIVED NEUTROPHIL-ACTIVATING FACTOR) (LYNAP-1) (PROTEIN 3-10C) (NEUTROPHIL-ACTIVATING FACTOR) (LYNAP) (PROTEIN 3-10C) (NEUTROPHIL-ACTIVATING FACTOR) (LYNAP) (PROTEIN 3-10C) (NEUTROPHIL-ACTIVATING FACTOR)
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MUKAIDA N.,
J. IMMUNOL.
                         SEQUENCE (
                                                                                                                                                                                                                        SEQUENCE MEDLINE;
GREGORY H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
MEDLINE; 88258376.
MATSUSHIMA K., MORISHITA K., YOSH.
LEW W., APPELLA E., KUNG H., LEON.
J. EXP. MED. 167:1883-1893(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE; 87224164.
SCHMID J. WEISSMANN C.;
J. IMMUNOL. 139:250-256(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; (
                                                                                                                                                                                                    BIOCHEM.
                                                                                                                                                                                                                                                                                                                                   SUZUKI K., MIYASAKA MIZUNO S.;
                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE OF 23-54.
MEDLINE; 89279141.
                                                                                                                                                                                                                                                                                                                                                                                                                                            GOLDS E.E.,
BIOCHEM. J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE OF 23-46.
MEDLINE; 89246368.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUBMITTED
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MEDLINE; 89313739.
KOWALSKI J., DENHARDT
MOL. CELL. BIOL. 9:194
                                                                                                                                                        SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              72
                                                                                                                                                                                                                                                                                                               EXP.
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                                                                                                                                                                                                                        TE OF 28-99.
S; 88162914.
TH., YOUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity 83.3%;
10; Conservative
                                                                                                                                                                                                                                                                                                               MED.
                      0F 28-69.
88097462.
                                                                                    88106502.
PEVERI P.,
BIOPHYS. RE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89309826.
N., SHIROO M., MATSUSHIMA
DL. 143:1366-1371(1989).
                                                                                                                                                                                                    BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                                                                        OF 28-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (JAN-1993)
                                                                                                                                                                                                                                                                                                                                                                                                                                            MASON P., NYIRKOS
259:585-588(1989).
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  MATSUSHIMA
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9:1946-1957(1989).
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                                                                                      ASCHAUER H.,
ES. COMMUN. 1
                                                                                                                                                                                                                                                                                                                                                          Η.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TO
                                                                                                                                                                                                 SCHROEDER J.M., MROWIETZ U., COMMUN. 151:883-890(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                        OTA H., YAMAKAWA Y., TAGAWA M., KURAMOTO
  <u>۳</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             H., LEONARD E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Mismatches 1;
  TANAKA
                                                                                      ., BAGGIOLINI M.;
149:755-761(1987)
s.
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  ROBINSON E.A.,
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CC -i- FUNCTION: IL-8 IS A CHEWOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
CC BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES, IT IS ALSO INVOLVED IN
CC NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
CC -i- SUBUNIT: HOMODIMER.
CC -i- SUBUNIT: HOMODIMER.
CC -i- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
CC -C-Y-C) (CHEMOKINE CXC).
DR EMBL; Y00787; G34519; -.
DR EMBL; M17017; G179580; -.
DR EMBL; M26383; G188628; -.
DR EMBL; M26383; G188628; -.
DR EMBL; M26383; G186586; -.
DR EMBL; M26383; G186586; -.
DR EMBL; M26383; G186586; -.
DR PIR; S03975, S03975.
DR PIR; S03975, S03975.
DR PIR; S04216; S04216.
DR PIR; S04216; S04216.
DR PIR; S04216; S04216.
DR PDB; 11LB; 15-OCT-93.
DR PDB; 11KL; 15-OCT-95.
DR PDB; 11KL; 15-OCT-95.
DR PDB; 11KL; 15-OCT-95.
DR PDB; 11KL; 15-OCT-95.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (15)
N-TERMINAL FORMS.
MEDLINE: 91006326.
WEDLINE: 91006326.
VAN DAMME J., RAMPART M., CONING R.,
WILLEMS J., BILLIAU A.;
WILLEMS J., BILLIAU A.;
WILLEMS J., BILLIAU A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 911/1400.
CLORE G.M., GRONENBORN A.M.;
7 MOL. BIOL. 217:611-620(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE; 90234679.
CLORE G.M., APPELLA E., YAMADA M.,
BIOCHEMISTRY 29:1689-1696(1990).
                SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE; 90216714.
BALDWIN E.T., FRANKLIN K.A., APPELLA E.,
                                                                                                                                                                                                                                                                                                                                        BAGGIOLINI M., CLARK-LEWIS I.; FEBS LETT. 307:97-101(1992).
                                                                                                                                                                                                                                                                                                                                                                                                     BIOCHEMISTRY 30:3128-3135(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                         CLARK-LEWIS I., MOSE
                                                                                                                                                                                                                                                                                                                                                                                                                                         SYNTHESIS OF 28-99. MEDLINE; 91175767.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VAN DAMME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-TERMINAL FORMS.
MEDLINE; 89231715.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROC. NATL. ACAD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BALDWIN E.T., WEBER I.T., ST CHARLES R., XUAN J.C., YAMADA M., MATSUSHIMA K., EDWARDS B.F., CLORE G.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 X-RAY CRYSTALLOGRAPHY, AND MEDLINE; 91171286.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WLODAWER A., WEBER I.T.;
J. BIOL. CHEM. 265:6851-6853(1990).
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                                         CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 92347562
                                                                                                                                                                                                                                                                                                                                                                                                                   AEBERSOLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS), AND
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             J. BIOCHEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    91110556
                                         CHEMOTAXIS;
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EM. 181:337-344(1989).
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D. SCI. U.S.A.
                                      SMALL_CYTOKINES_CXC; 1.
xis; inflammatory response;
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                                                                                                                                                                                                                                                                                                                                                                                                                            WALZ A.,
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INTERLEUKIN-8.
ONE OR MORE OF THESE RESIDUES ARE MISSING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84:9233-9237(1987)
                                                                                                                                                                                                                                                                                                                                                                                                                             BAGGIOLINI
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                                       SIGNAL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OSSELAER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MATSUSHIMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BILLIAU A.;
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                                       3D-STRUCTURE
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Best Local S
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Best Local Similarity
                                                                                                                                                                                                                                                            DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                      ILE_CAVPO STANDARD; PRT; 101 AA.

P49113;
01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8) (NEUTROPHIL AT
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STRAND
TURN
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DISULFID
CONFLICT
HELIX
13

MCP 13

MCP 2011 STANDARD;

P28291;

01-DEC-1992 (REL. 24, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                         YOSHIMURA T., JOHNSON D.G.;
J. IMMUNOL. 151:6225-6236(1993).
-!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-!- FUNCTION: TO IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS (BY SIMILARITY).
-!- SUBUNIT: HOMODIMER (BY SIMILARITY).
-!- SUBUNIT: HOMODIMER (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TURN
HELIX
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STRAND
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 94065176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-SPLEEN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
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75.0%;
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75.0%;
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                                                                                                                                                                                                                                                              MΨ;
                                                                                                                                                                                 Score 86; DB 1; 1
Pred. No. 4.55e-07;
2; Mismatches 1
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Pred. No. 4.55e-07
3; Mismatches (
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BY SIMILARITY.
BY SIMILARITY.
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Best Local S
Matches 1
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BIOCHEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DISULFID DISULFID SEQUENCE
                                                             STRAIN-NEW ZEALAND WHITE; TISSUE-SPLEEN;
MEDLINE; 9125489.
YOSHIMURA T., YUHKI N.;
J. IMMUNOL. 146:3483-3488(1991).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                            MCP1_RABIT
P28292;
                                                                                                                                                                                                                                                                                                      01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-DEC-1992 (REL. 24, LAST SE
01-NOV-1995 (REL. 32, LAST AN
MONOCYTE CHEMOTACTIC PROTEIN
SEMINAL FLUID PROTEIN).
                                                                                                                                                                                                                                            ORYCTOLAGUS CUNICULUS (RABBIT) EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; L32659; G624394; -. EMBL; M84602; G163395; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE-SEMINAL PLA
MEDLINE; 92181448
WEMPE F., EINSPAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TISSUE-SEMIAAL PLASMA;
MEDLINE; 92096117.
WEMPE F., HENSCHEN A., SCHEIT K.H.;
DNA CELL BIOL. 10:671-679(1991).
                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                        EUTHERIA; LAGOMORPHA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- SIMILARITY: BELONGS TO C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BIOCHEM. BIOPHYS. RES.
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOD_RES
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NEUTROPHILS.
SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHEM. BIOPHYS. RES. COMMUN. 202:1272-1279(1994).
FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NEUTROPHILS.
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JC2336; JC2336.
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EICLDPKQKWVQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KUHLMANN J.K., SCHEIT K.H.; SIOPHYS. RES. COMMUN. 202:12
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                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
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83.3%;
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ANNOTATION UPDATE)
IN 1A PRECURSOR (MCP-1A)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 85; DB 1;
Pred. No. 7.97e-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                   VERTEBRATA; TETRAPODA; MAMMALIA;
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MONOCYTE CHEMOTACTIC PROTEIN
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183:232-237(1992).
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                                                                                                                                                                                                                                                                                                                                                                                                                  125
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IMMUNITY 4:1-14(196).

IPMUNITY 4:14(196).

IPMUNITY 4:14(196
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P48298;
01-FEB-1996
01-FEB-1996
15-JUL-1998
                                                                                                                                                                                     EMBL; U4
MGD; MGI
PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID DISULFID
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CARBOHYD
                                                                                                                                                                                                           EMBL; U26426; G995911; -.
EMBL; U40672; G1113937; -.
MGD; MGI:103576; SCYA11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GONZALO J.-A., JIA G.-Q., AGUIRRE V., FRIEND D., COYLE A.J., JENKINS N.A., LIN G.-S., KATZ H., LICHTMAN A., COPELAND N.G., GUTIERREZ-RAMOS J.-C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL
                                                                                                                                                                                                                                                                                                                      -!- PTM: O-GLYCOSYLATED
-!- SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ROTHENBERG M.E., 1
PROC. NATL. ACAD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EOTAXIN PRECURSOR (EOSINOPHIL SCYAll.
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PROSITE; PS00
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                                                                                                                                      INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 96158746.
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L; M57440; G165470; -.
P; P13500; 1MCA.
SITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                     CELLS), INTESTINE, HEART, SPLEEN, KIDNEY.
INDUCTION: BY INTERFERON-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ICLDPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
10; Conser
                                                                                                                                                       PS00472; SMALL_CYTOKINES_CC; 1. IL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                             (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; CHEMOTAXIS; S
1 23
24 125
24 24
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125
                                   1 23
1 23
24 97
32 57
33 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (REL. 33, CREATED)
(REL. 33, LAST SEQUENCE UPDATE)
(REL. 36, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE-LUNG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    83.2%;
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75
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₹ A.D.,
U.S.A.
                                                                                                                                                                                                                                                                                                                           70
                                                                                                                                                                                                                                                                                                                                                       (PROBABLE)
     ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      M.
                                                                                                                                                                                                                                                                                                                   THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
F85A96BC CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 84; D
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 POTENTIAL.
POTENTIAL.
; FBAC9D27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFLAMMATORY RESPONSE; GLYCOPROTEIN BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PYRROLIDONE CARBOXYLIC SIMILARITY).
                                                                                                        POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LEDER P.;
92:8960-8964(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERTEBRATA; TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NOTATION UPDATE)
CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; I
1.39e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 125
                                                                                                                                                            SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                   IN THE THYMUS.
EOLAR EPITHELIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROMINENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KOPF M.,
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DEOTA_RAT

C P97545; 008780;
C P97545; 008780;
JT 15-JUL-1998 (REL. 36, CREATED)
DT 15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
DT 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
DT 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
DE EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
OS RATTUS NORVEGIOUS (RAT).
OS RATTUS NORVEGIOUS (RAT).
OS RATTUS NORVEGIOUS (RAT).
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                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 10; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local :
                                                    MCP3_HUMAN STAND...

P80098;

01-DEC-1992 (REL. 24, CREATED)

01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)

15-UUL-1998 (REL. 36, LAST ANNOTATION UPDATE)

CHEMOTACTIC PROTEIN 3 PRECURSOR (MCP-3) (MONOCYTE CHEMOTACTIC)

CONTENTS OF THE PROTEIN 3) (NC28).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
DISULFID
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA
-:- FUNCTION: IN RESPONSE TO THE PRESENCE OF AL
DIRECTLY PROMOTES THE ACCUMULATION OF EOSIN
FEATURE OF ALLERGIC INFLAMMATORY REACTIONS
-:- SUBCELLULAR LOCATION: EXTRACELLULAR.
                                      HOMO SAPIENS (HUMAN)
EUKARYOTA; METAZOA; (
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; PS00472; SMALL_CYTOKINES_
EOSINOPHIL; CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C-C) (CHEMOKINE CC).
EMBL; Y08358; E274141; -.
EMBL; U96637; G2098785; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WILLIAMS C.M., FLANAGAN B.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -1- PTM: O-GLYCOSYLATED (PROBABLE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUBMITTED (DEC-1996)
SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE=LUNG;
                                                                                                                                                                                                                                                                                                                                                                     71
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                                                                                                                                                                                                                                                                                                                                                    EICADPKKKWVQ 82
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                                                                                                                                                                                                                                                                                                                            EICLDPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EICLDPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10KINE;
Y RESPONSE
1 23
74 97
77 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97
                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10851
                                                                                                                                                                                                                                                                                                                                                                                                                                82.2%;
83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
  AND
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SEQUENCE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     _CYTOKINES__CC; 1.
HEMOTAXIS; GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WW;
                                                                                                                                                                                                                                                                                                                                                                                                      Score 83; DB 1; L
Pred. No. 2.42e-06;
0; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WILSON S.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 POTENTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05B4ED45 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     83; DB 1; I
No. 2.42e-06;
  31-67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   J DATA BANKS.
E OF ALLERGENS,
E EOSINOPHILS, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COLEMAN J.C.
AND 71-99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ILS, A PROMINENT SIMILARITY).
                                                           MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            THIS PROTEIN
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                                                                               밁
                                        Matches
                                                         Query Match
                                                                                                                                                                                                                  EMBL; X72308; G313708; A
EMBL; X72309; ROT ANN
EMBL; X71087; G288399; A
EMBL; X71087; G288399; A
EMBL; X71087; G288397; A
FIR; UC1478; UC1478
PIR; S32222; S32222.
PIR; A54678; A54678.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE, 93305913.

MINTY A., CHALON P., GUILLEMOT J.C., KAGHAD MINTY A., MILOUX B., MINTY C., RAMOND P., SHIRE D., FERRARA P., CAPUT D.;

THE OTTOKINE NETW. 4:99-110(1993).
                                                                                                                                                                                                                                                                                                                                          MEDLINE: 97263733.

MEUNIER S., BERNASSAU J.-M., GUILLEMOT J.-C., FERRARA P., DAR BIOCHEMISTRY 36:4412-4422(1997).

-1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND EOSINOPHILS, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE ANTI-ACTIVITY. ALSO INDUCES THE RELEASE OF GELATINASE B. THIS
                                                                                         CONFLICT
                                                                                                                     MOD_RES
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLINE; 94375065.
OPDENAKKER G., FITEN P.,
LAUREYS G., VAN DAMME J.;
                                                                               SEQUENCE
                                                                                                                                                CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                KIM K.-S., RAJARATHNAM K., CL
FEBS LETT. 395:277-282(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRUCTURE BY NMR, MEDLINE; 97053697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 92308855.
VAN DAMME J., PROOST P., LENA
J. EXP. MED. 176:59-65(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 93213290.
OPDENAKKER G., FRC
BIOCHEM. BIOPHYS.
                                                                                                            CARBOHYD
                                                                                                                                                                                                                                                                                                          CAN BIND HEPARIN.
-!- SUBUNIT: MONOMER.
-!- PTM: O-GLYCOSYLATED.
-!- SIMILARITY: BELONGS TO THE INTERCRINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE - OSTEOSARCOMA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE OF 30-99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENOMICS 21:403-408(1994).
                                                                                                                                                             SIGNAL
                                                                                                                                                                                 CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                               STRUCTURE BY NMR
                                                                                                                                                                     INFLAMMATORY
                   73 EICADPTQKWVQ
                                                Local
EICLDPKQKWVQ
                                       Similarity
10; Conser
                                                                                                                                                                             PS00472; SMALL_CYTOKINES_CC; 1.
;; CHEMOTAXIS; HEPARIN-BINDING; GLYCOPROTEIN; SIGNAL;
                                                                                                                                                                                                                                                                                                    (CHEMOKINE CC)
                                                                                                                                                                                                             15-0CT-97
                                                                               99
                                                                                        RESPONSE;
1 23
24 99
24 59
34 59
35 75
35 75
39 29
30 30
68 70
                                        Conservative
                                                                              A,
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                                                                                                                    WONOCYTE CHEMOTACTIC PROTEIN PYRROLIDONE CARBOXYLIC ACID. BY SIMILARITY.

BY SIMILARITY.
                                                                             7502E19C CRC32;
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191:535-542(1993)
                                        Mismatches
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                                                83; DB 1; I
No. 2.42e-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            J.-P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                           Ι.,
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A N., LUPKER
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TAREFORD DORS ARRESTED AND TO THE PROPERTIES OF THE PROPERTY O
                                                                                                               EOTA_HUMAN STANDARD; PRT; 97 AA. P51671; P50877; Q92490; Q92491; 01-OCT-1996 (REL. 34, CREATED) 01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE) 01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE) EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KITAURA M., NAKAJIMA T., IMAI T., H
TIFFANY H.L., MURPHY P.M., YOSHIE O
J. BIOL. CHEM. 271:7725-7730(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GARCIA-ZEPEDA E.A., ROTHENBERG MORTON C.C., LUSTER A.D.; GENOMICS 41:471-476(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-PLACENTA;
MEDLINE; 97312708.
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BARTELS J., SCHLUE
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MEDLINE; 96189937.
PONATH P.D., QIN S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
MEDLINE; 96181758.
MEDLINE; 96181758.
GARCIA-ZEPEDA E.A., ROTHENBERG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOTALIA.
HOMO SAPIENS (HUMAN).
UNIKARYOTA: METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                       PROSITE; PS00472; SMALL_CYTOKINES_CC; EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BARTELS J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 97445071.
HEIN H., SCHLUETER C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-LUNG;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE=FORESKIN;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE=SMALL INTESTINE; MEDLINE; 96205964.
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                                        NFLAMMATORY
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.D., QIN S., RINGLER D.J., CLARK-LEWIS I., WANG J., K
, SHI X., GONZALO J.A., NEWMAN W., GUTIERREZ-RAMOS J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INVEST. 97:604-612(1996).
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  7 RESPONSE;
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                                      CHEMOTAXIS; GLYCOPROTEIN; POLYMORPHISM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KULKE R., CHRISTOPHERS
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., YOSHIE O.;
POTENTIAL.
ECTAXIN.
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Е.,
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                                                            SIGNAL;
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                                                              ILB_MACMU STANDARD; PRT; 101 AA P51495; 01-OCT-1996 (REL. 34, CREATED) 01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE) 01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATINTERLEUKIN-8 PRECURSOR (IL-8).
                                                                                                                                                                                                                                         VILLINGER F.J., BRAR S.S., MAYNE A.E., CHIKKALA N., ANSARI A.A.;
VILLINGER F.J., BRAR S.S., MAYNE A.E., CHIKKALA N., ANSARI A.A.;
J. IMMUNOL. 155.;3946-3954(1995).

-I- FUNCTION: II-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-I- SUNCTION: IT IS RELEASED FROM SEVERAL CELL TYPES IN NEUTROPHILA, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN NEUTROPHILA, CELL TYPES IN RESPONSE TO AN INFLAMMATORY STIMULUS (BY SIMILARITY).

-I- SUBUNIT: HOMODIMER (BY SIMILARITY).

-I- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE CAX-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                     CERCOCEBUS TORQUATUS ATYS (RED-CROWNED MANGABEY) (SOOTY MANGABEY). EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA; EUTHERIA; PRIMATES.
                           MACAQUE).
EUKARYOTA; METAZOA;
 SEQUENCE FROM N.A.
                    EUTHERIA;
                                               MACACA MULATTA (RHESUS MACAQUE),
                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                     75 ELCLDPKEPWVQ 86
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1 EICLDPKQKWVQ 12
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Similarity 75.0%;
9; Conservative
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101 AA;
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75.0%;
                             CHORDATA;
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Pred. No. 4.
2; Mismatc
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Pred. No. 4.21e-06;
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BY SIMILARITY.
; 47F1BF00 CRC32;
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R ->
                            VERTEBRATA;
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> T (IN CLONE 53).
> S (IN CLONE 34).
> R (IN CLONE 53).
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                                                AND MACACA NEMESTRINA (PIG-TAILED
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4.21e-06;
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                             TETRAPODA;
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                                                                                                                                                                                                             Length 101;
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MEDLINE; 96003435.
VILLINGER F.J., BRAR S.S., MAYNE
- **MMTNOL. 155:3946-3954(1995).
                                            DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID
SEQUENCE
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P49873;
01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             :- SIMILARITY: BELLENCE

C-X-C) (CHEMOKINE CXC).

2MBL; U19849; G644816; -.

EMBL; U19851; G644820; -.

EMBL; S7855; G1042228; -.

EMBL; S7855; G1042228; -.

EMBL; S7855; G10421; SMALL_CYTOKINES_CXC; 1.

PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.

PROSITE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SI

CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SI

CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SI

CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SI
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-i- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHIL BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES I
                                                                                                                                                                                                                                                  EMBL;
                                                                                                                                                                                                                                                                                        CAN BIND HEPARIN.
-!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SPECIES-M.MULATTA; TISSUE-BLOOD;
MEDLINE; 95355132.
                                                                                                                                                                                   SIGNAL
                                                                                                                                                                                                        CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                    BIOCHEM. BIOPHYS. RES. COMMUN.
                                                                                                                                                                                                                                                                                                                                                                                                            HOSANG K.K., KNOKE I.I., KLAUDINY J.J., WEMPE F.F., SCHEIT K.K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. MEDLINE; 95091716.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUTHERIA; ARTIODACTYLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SCYA8 OR MCP2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHEMOATTRACTANT PROTEIN
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SUBUNIT: HOMODIMER (BY SIMILARITY).
SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (S
                                                                                                                                                                                                                                                                                                                                                                 FUNCTION:
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                                                                                                                                                                                                                               Z48480; G68:
E; PS00472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                (CHEMOKINE CC).
480; G683719; -
                                                                                                                                                                                                        CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23
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101
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                                                                                                                                 24
                                               A.
                                                                                                                                                                                                                                                                                                                                                            IYS. RES. COMMUN. 205:148-153(1994).
CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES. THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A,
                                                                                                                                                                                                   SMALL_CYTOKINES_CC; 1.
XIS; SIGNAL; HEPARIN-BINDING;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          86
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                                          BY SIMILARITY.

MONOCYTE CHEMOTACTIC PROTEIN 2.

PYRROLLDONE CARBOXYLIC ACID (BY
SIMILARITY).

BY SIMILARITY.

BY SIMILARITY.

BY SIMILARITY.

BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 82; DB 1; I
Pred. No. 4.21e-06;
2; Mismatches 1
  Score
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3Y SIMILARITY.
3Y SIMILARITY.
77D78AAO CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
  81;
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  B
  1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1;
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Length
                                                                                                                                                                                                        INFLAMMATORY RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
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  99;
                                                                                                                                                                                                                                                                                             SIMILARITY)
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SO INVOLVED IN
SELL TYPES IN
                                                                                                                                    (BY
                                                                                                                                                                                                                                                                                                                                                                                                                                   W.W.
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                                                                                                                                                                                                                                                                                               CYTOKINE
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RESULTATION OF THE TENTAL STATE OF THE TENTAL 
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Best Local 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                Q62401;
01-NOV-1997
01-NOV-1997
15-JUL-1998
MONOCYTE CHEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MCP1_CAVPO
Q08782;
01-NOV-1995
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DISULFID
CARBOHYD
                                                                               MEDLINE; 97
JIA G.-Q.,
WERSHIL B.K
J. EXP. MED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL
CHAIN
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SCYA2 OR MCP1.
  SEQUENCE;
                                                                                                                                                                                                                                             MUS MUSCULUS (MOUSE)
EUKARYOTA; METAZOA;
EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN=2; TISSUE=S
MEDLINE; 93267104.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAVIA PORCELLUS (GUINEA PIG). EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01.NOV-1995 (REL. 32, CREATED)
01.NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                               CHEMOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                            SEQUENCE FROM N.A.
MEDLINE; 97079149.
JIA G.-Q., GONZALO J.A., LLOYD C.,
WERSHIL B.K., GUTIERREZ-RAMOS J.C.,
J. EXP. MED. 184:1939-1951(1996).
                                                                                                                                                                                                                                                                                                                             SCYA12 OR MCP5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MCP5_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -!- SUBUNIT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ÷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COSHIMURA T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         73 EVCADPOOKWVO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 75.0% es 9; Conservative
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  97149438.
                                                                                                                                                                                                                                                                                                                                                                                997 (REL. 35, CREATED)
997 (REL. 35, LAST SEQUENCE UPDATE)
998 (REL. 36, LAST ANNOTATION UPDATE)
CHEMOTACTIC PROTEIN 5 PRECURSOR (MCP-5)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PS00472;
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N: CHEMOTACTIC FACTOR
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97
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IGNAL; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HOMODIMER; IN EQUILIBRIUM (BY TO THE INTERCRINE BETA FAMILY
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1; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 81; DB 1; 1
Pred. No. 7.29e-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY.
BY SIMILARITY.
POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PYRROLIDONE CARBOXYLIC SIMILARITY).
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                                                                                                                                                                                                                                                                            VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
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                                                                                                                                       KREMER
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ONE CARBOXYLIC ACID (BY
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                                                                                                                                                                                                                                                                            TETRAPODA;
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                                                                                                                                       MARTINEZ A.C.,
                                                                                                                                                                                                                                                                            MAMMALIA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C -1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS EOSINOPHILS, MONOCYTES, AND LYMPHOCYTES BUT NOT NEUTROPHILS; POTENT MONOCYTE ACTIVE AND LYMPHOCYTES BUT NOT NEUTROPHILS; POTENT MONOCYTE ACTIVE AND LYMPHOCYTES BUT NOT NEUTROPHICS; POTENT MONOCYTE ACTIVE LINGUIST THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC INFLAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A PLYOTAL ROLE DURING EARLY STRACES OF PATHOGENS AND INFLAMMATION.

C -1- SUBUNIT: HOMODIMER (BY SIMILARITY).

C -1- TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND THYMUS. ALSO FOUND IN THE SALLVARY GLANDS CONTAINING LYMPH NODES, BREAST, HEART, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.

C -1- INDUCTION: BY IFN-GAMMA AND LIPOPOLYSACCHARIDE (LPS).

C -C) (CHEMOKINE CC).

C -SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE EMBL; U50712; G1477582; -.

EMBL; U50712; G1477583; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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Best Local
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LUSTER A.D.;
J. EXP. MED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P40224;
01-FEB-1995 (REL. 31, CREATED)
01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
01-FEB-1997 (REL. 35, LAST ANNOTATION UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
STROMAL CELL-DERIVED FACTOR 1 PRECURSOR (SDF-1) (PRE-B CELL GROWTH STIMULATING FACTOR) (PBSF) (12-O-TETRADECANOYLPHORBOL 13-ACETATE STIMULATING FACTOR)
(TPAR1) (THYMIC LYMPHOMA CELL STIMULATING FACTOR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DISULFID DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE;
CYTOKINE;
                                              NOMURA M., NAKATA Y., UZAWA A., NOSE M., AKASHI M., SUZUKI G.; SUBMITTED (DEC-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- EUNCTION: CHEMOATTRACTANT ACTIVE ON T-LYMPHOCYTES, MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SDF1_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE; 93342488. TASHIRO K., TADA H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIGNAL
       -
                                                                                                                     STRAIN=AKR/J;
                                                                                                                                                                                                                                             JIANG W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE; 94181581.
NAGASAWA T., KIKUT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; C
                                                                                                                                                                                                                     WEINSTEIN
                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. MEDLINE; 95073497.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         PROC. NATL.
                                                                                                                                                                                                                                                                                                                                           SCIENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EUTHERIA;
                                                                                                                                              EQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        72 EICADPKEKWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
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                               NOT
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ITE; PS00472; SMALL_CYTOKINES_CC; 1.
KINE; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EICLDPKQKWV
                             NEUTROPHILS
                                                                                                                                                                                                                                                                                                                                        K., TADA H., HEILKER
261:600-603(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9;
                                                                                                                                                                                                                     ZHOU P.,
                                                                                                                                                                                            RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  104 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAD.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KIKUTANI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
STIMULATES THE PROLIFERATION OF
                                                                                                                                                                                            215:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82
                                                                                                                                                                                                                                                                                                                                                                                                                                                           SCI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          . 22
104
58
74
                                                                                                                                                                                            284-293(1994)
                                                                                                                                                                                                                                           KAHN S.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           78.2%;
81.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11659
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       KISHIMOTO T.;
S.A. 91:2305-2309(1994).
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Pred.
1; N
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MONOCYTE CHEMOTACTIC PROTEIN 5.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                           TOMITA N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08FA6C35 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                            SHIROZU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            79;
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. 2.17e-05;
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                                                                                                                                                                                                                                           JOHNSON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                              NAKANO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 104,
    BONE MARROW-DERIVED
                                                                                                                                                                                                                                           M.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
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HE SULL PROPERTY OF THE PROPER
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Best Local
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P48061;
01-FEB-1996 (REL.
01-FEB-1996 (REL.
15-JUL-1998 (REL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DISULFID DISULFID VARSPLIC
                                                                                                                                                                                                                                                                                                                                                                                            PIR; A534
MGD; MGI:
PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).

EMBL; D21072; G468457; -.

EMBL; L12029; G393180; -.

EMBL; L12030; G393182; -.

EMBL; L12030; G393182; -.

EMBL; S74318; G786394; -.

EMBL; D43804; G1304174; -.

EMBL; D43805; G1304175; -.

EMBL; D43805; G1304175; -.

PIR; A53497; A53497.
                                                        -!- ALTERNATIVE PRODUCTS: TWO DIFFERENT FORMS
PROBABLY GENERATED BY ALTERNATIVE SPLICING
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPH
C-Y-C) (CHEMOKINE CXC).
EMBL: U16753; 61571508; -.
EMBL: L36033; 612720366; -.
EMBL: 136033; 61270366; -.
EMBL: 13605; 28-JAN-98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL
                                                                                                                                                                                                                                                                                   CRUMP M.P., GONG J.H., ARENZANA-SEISDEDOS F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STIMULATING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STROMAL CELL-DERIVED FACTOR 1 PRECURSOR (SDF-1)
                                                                                                                                                                                                     -!- FUNCTION: CHEMOATTRACTANT NOT NEUTROPHILS.
                                                                                                                                                                                                                                                 ЕМВО J. 16:6996-7007(1997)
                                                                                                                                                                                                                                                                    CLARK-LEWIS I.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CYTOKINE;
                                                                                                                                                                                                                                                                                                                             MEDLINE;
                                                                                                                                                                                                                                                                                                                                                  STRUCTURE BY NMR OF
                                                                                                                                                                                                                                                                                                                                                                                          SENOMICS 28:495-500(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBMITTED (OCT-1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       69 QVCIDPKLKWIQ
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ALTERNATIVE PRODUCTS: TWO DIFFERENT FORMS (ALPHA AND BETA)
PROBABLY GENERATED BY ALTERNATIVE SPLICING.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EICLDPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MGI:103556; SDF1.
TE; PS00471; SMAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity 7; Conse.
PS00471; SMALL_CYTOKINES_CXC; FALSE_NEG
                                                                                                                                                                                                                                                                                                                               98046030.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PS00471; SMALL_CYTOKINES_CXC; FALSE_NEG.
CHEMOTAXIS; GROWTH FACTOR; SIGNAL; ALTERNATIVE SPLICING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIMATES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               89
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320
89
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               33, CREATED)
33, LAST SEQUENCE UF
36, LAST ANNOTATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10032 MW;
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89
55
71
                                                                                                                                                                                                                                                                                                                                                  22-88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (PBSF).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  58.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                       LOETSCHER F
                                                                                                                                                                                                                                                                                                                                                                                                                                  INAZAWA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred.
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BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
                                                                                                                                                                                                                          ACTIVE
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                                                                                                                                                                                                                                                                                                                                                                                                                                J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ċ
                                                                                                                                            INTERCRINE ALPHA
                                                                                                                                                                                                                                                                                       жу.,
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No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                  TASHIRO K.,
                                                                                                                                                                                                                                                                                       .L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           UPDATE)
                                                                                                                                                                                                                          ON T-LYMPHOCYTES, MONOCYTES,
                                                                                                                                                                                                                                                                                       RAJARATHNAM K.,
L., BAGGIOLINI M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.72e-05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ą
                                                                                                                                                                                  (ALPHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ۲.
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                                                                                                                                          FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (PRE-B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                       AMARA A.
                                                                                                                                                                                    AND
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                                                                                                                                                                                    BETA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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D.,
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STEP TO SERVICE STORY OF STEP TO SERVICE STORY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFFEE
                                                                                                                                                                                                    AN JOSE P.J., GRIFFITHS-JOHNSON D.A., COLLINS P.D., WALSH D.T.,
AN MOQBEL R., TOTTY N.F., TRUONG O., HSUAN J.J., WILLIAMS T.J.;
AL J. EXP. MED. 179:881-887(1944).

-!- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN
DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, A PROMINENT

C. FEATURE OF ALLERGIC INFLAMMATORY REACTIONS.

C.-!- SUBCELLULAR LOCATION: EXTRACELLULAR.

C.-!- SUBCELLULAR LOCATION: EXTRACELLULAR.

C.-!- TISSUE SPECIFICITY: LUNG.

C.-!- FINILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE DEC.).

C.-C.) (CHEMOKINE CC).

CREMBL; UT8941; G687656; -.

EMBL; X77603; G602552; -.

DR PROSITE; PS00472; SMALL CYTOKINES CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local &
Matches
                  Query Match
Best Local S
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUN-1994 (REL. 3
01-OCT-1996 (REL. 3
15-JUL-1998 (REL. 3
ECTAXIN PRECURSOR (SCYALL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CYTOKINE; CHEN
3D-STRUCTURE.
SIGNAL
CHAIN
                                                                           CHAIN
DISULFID
DISULFID
CARBOHYD
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE: 95091818.
JOSE P.J., ADCOCK I.M.,
WELLS T.C., WILLIAMS T.
                                                                                                                                                                  SIGNAL
                                                                                                                                                                                              EOSINOPHIL;
                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE; 94157409.
JOSE P.J., GRIFFIT
                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN-HARTLEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BIOCHEM. BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            J. EXP. MED. 181:1211-1216(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUKARYOTA; METAZOA;
EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAVIA PORCELLUS (GUINEA PIG).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P80325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EOTA_CAVPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 24-96.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                               INFLAMMATORY
                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 EICLDPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QVCIDPKLKWIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity 58.3% 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95173589.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHEMOTAXIS; GROWTH FACTOR; SIGNAL; ALTERNATIVE SPLICING:
                                                                                   24 PS
1 72
24 96
1 72
96
1 72
93
88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           93
                                                                        1
24
31
32
93
88
88
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1
20
30
32
32
3AA;
                                                                                                                                                                                          CYTOKINE; CHEMOTAXIS;
                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29, CREATED)
34, LAST SEQUENCE UPDATE)
36, LAST ANNOTATION UPDAT
(EOSINOPHIL CHEMOTACTIC P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RES.
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93
55
71
10666 MW;
                                 76.2%;
81.8%;
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                                                                             10753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       T.J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GRIFFITHS-JOHNSON D.A.,
                                                                           MW;
                Score 77;
Pred. No.
0; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      POWER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 78; Pred. No.
                                                                        EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
POTENTIAL.
D -> G (IN REF. :
DD28C7E5 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  POTENTIAL.
STROMAL CELL-DERIVED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NOTATION UPDATE)
CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4B9911C7 CRC32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ER C.A.;
205:788-794(1994).
                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                 77; DB 1; I
No. 6.37e-05;
                                                                                                                                                                                           GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DRAZEN J.M., LEDER
                                                                                       2)
                                             Length 96;
                  2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                           SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BERKMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FACTOR 1.
                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93;
                  0;
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                Gaps
                  0
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      BARARE
                                                                                       RESULT
                                                                                                                                                               밁
                                                                                                                                                                                        Query Match
Best Local S
Matches
               P80343;
01-FEB-1995
01-FEB-1995
15-JUL-1998
                                                                                                                                                                                                                                                  CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                               DISULFID
DISULFID
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MI1A_RAT STANDARD: PRT; 92 AA. P50229; P50229; O1-OCT-1996 (REL. 34, CREATED) O1-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE) O1-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                         CHAIN
01-FEB-1995 (REL. 31, CREATED)
01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1B (MCP-1B) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SHANLEY T.P., SCHMAL H., FRIEDL J. IMMUNOL. 154:4793-4802(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. STRAIN-LONG EVANS; TISSUE-LUNG, MEDLINE; 95238980.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SCYA3 OR MIP1A.
RATTUS NORVEGICUS (RAT)
EUKARYOTA; METAZOA; CHOI
                                                                                                                                                                                                                                                                                                                                       SIGNAL
                                                                                                                                                                                                                                                                                                                                                       CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE OF 24-57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE; 95298037
SHI M.M., GODLESK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-CD-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR
                                                                           MCPB_BOVIN
                                                                                                                                                                                                                                                                                                                                                                    PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                   EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                            -!- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS)
-!- SIMILARITY: BELONGS TO THE INTERCRINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN-WISTAR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BIOCHEM. BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A
                                                                                                                                               71 QICADPKETWVQ : | | | | | | | | | | |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             71
                                                                                                                                  1 EICLDPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N
                                                                                                                                                                                                                                                                                                                                                                                                                 6-0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFLUX. THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ICADPKKKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ICLDPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                U22414; G790633; -. U06435; G459150; -.
                                                                                                                                                                                          Similarity
8; Conse
                                                                                                                                                                                                                                                                                                                                                                     PS00472;
                                                                                                                                                                                                                                                                                                                                                      CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        HEPARIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GODLESKI J.J.,
                                                                                                                                                                                                                                               34
35
35
57
92 A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-LUNG;
                                                                                                                                                                                          Conservative
                                                                          STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12
                                                                                                                                  12
                                                                                                                                                             82
                                                                                                                                                                                                                                                                                                                                                   SMALL_CYTOKINES_CC; 1.
XIS; INFLAMMATORY RESPONSE; SIGNAL; HEPARIN-BINDING
                                                                                                                                                                                                      75.2%;
66.7%;
                                                                                                                                                                                                                                                  6
57
10335
                                                                                                                                                                                                                                                                                            57
73
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMUN. 211:289-295(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAULAUSKIS
                                                                                                                                                                                                                                                     ¥.
                                                                                                                                                                                     Score 76; Db ...
bred. No. 1.09e-04;
                                                                                                                                                                                                                                                                C ≯
                                                                                                                                                                                                                                                                                           MACROPHAGE INFLAMMATORY
BY SIMILARITY
BY SIMILARITY
                                                                                                                                                                                                                                                  A -> T (IN REF. 2)
C -> W (IN REF. 2)
F48CF89F CRC32;
                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           H.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ٦.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   b
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                                                                           74
                                                                           À
                                                                                                                                                                                                                                                                                                                                                                                                                             BETA
                                                                                                                                                                                                                    Length 92
                                                                                                                                                                                                                                                                 AND
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FAMILY

(SMALL CYTOKINE

Indels

0

Gaps

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PROTEIN 1-ALPHA

WARD P.A.;

(MIP-1-ALPHA).

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RESULTATION OF THE PROPERTY OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
  SUBUNIT.

MEDLINE; 97053697.

KIM K.-S., RAJARATI
FEBS LETT. 395:277.

-!- FUNCTION: CHEMO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MCP2_HUMAN STANDARD; PRT; 99 AA.
P80075; P78388;
01-DEC-1992 (REL. 24, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2)
CHEMOATTRACTANT PROTEIN 2) (HC14).
SCYAB OR SCYA10 OR MCP2.
HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DISULFID DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CYTOKINE;
NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BIOCHEMISTRY 33:13406-13412(1994).

-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,

-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,

REUTROPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. AI

THE RELEASE OF GELATINASE B. THIS PROTEIN CAN BIND HEE

-!- PIM: THE N-TERMINAL IS BLOCKED.

-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BOS TAURUS EUKARYOTA;
                                                                                                                                                  VAN
                                                                                                                                                                                                                                                                        SEQUENCE OF 23-99 FROM N.A. MEDLINE; 91207938.
CHANG H.C., HSU F., FREEMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VAN COILLIE E., FITEN P.,
VAN DAMME J., OPDENAKKER G
GENOMICS 40:323-331(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A., MEDLINE; 97237052.
                                                                                                                                                                                                                                                                                                                                                             BIOCHEM. BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                     VAN
                                                                                                                                                                                                                                                                                                                                                                                                       VAN
                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE=BONE MARROW;
MEDLINE; 97224420.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROOST P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 95034774.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-KIDNEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EUTHERIA;
[1]
                                                                                                                                                                      MEDLINE; 92308855
                                                                                                                                                                                       TISSUE-OSTEOSARCOMA;
                                                                                                                                                                                                               SEQUENCE OF 26-99.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48
                                                                                                                              EXP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 EICLDPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                       COILLIE E., FROYEN F., NOMIYAMA H., MIURA R., AELST I., VAN DAMME J., OPDENAKKER G.; CHEM. BIOPHYS. RES. COMMUN. 231:726-730(1997).
  FUNCTION: CHEMOTACTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAURUS
                                                                                                                                                  DAMME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EICAEPKXXWVQ
                                                                                                                                                                                                                                                         IMMUNOL.
                                                                                                                              MED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CHEMOKINE CC).
PS00472; SMALL_CYTOKINES_CC;
CHEMOTAXIS; HEPARIN-BINDING
                                                                                                                          J., PROOST P., LENAERTS J.-P.,
2D. 176:59-65(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIMATES.
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                     RAJARATHNAM K., C
395:277-282(1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    74 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                       SU F., FREEMAN G.
1:388-399(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                91
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50
8360 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    74.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AND VARIANT GLN-69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AND VARIANT GLN-69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENAERTS J.-P., VAN DAMME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G.;
  FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NOMIYAMA H.,
                                         CLARK-LEWIS
                                                                                                                                                                                                                                                                          G.J.,
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BY SIMILARITY.
66172F08 CRC32;
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Pred. No. 1.85e-04;
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THAT
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                                                                                                                                                                                                                                                                          GRIFFIN J.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1
ATTRACTS MONOCYTES,
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                                         ë,
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                                                                                                                                              OPDENAKKER G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TETRAPODA;
                                         SYKES B.D.;
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                                                                                                                                                                                                                                                                          REINHERZ E.L.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MIURA
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LYMPHOCYTES,
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Best Local
                                                                                                                                                                                                                                                                                                                      01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 4 PRECURSOR (MIP-4) (PULMONARY AND ACTIVATION-REGULATED CHEMOKINE) (CC CHEMOKINE PARC) (ALTERNATIVE ACTIVATED MACROPHAGE ASSOCIATED CC CHEMOKINE 1) (AMAC-1).
SCYA18 OR MIP4.
                                                                                                                                                                                                                                                                                                                                                                                                        MIP4_HUMAN
P55774;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOD_RES
DISULFID
DISULFID
        DISCUSSION OF SEQUENCE.

MEDLINE; 97275308.

WELLS T.N.C., PEITSCH M.C.;

J. LEUKOC. BIOL. 61.545-550(1997).

-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS

MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED

INTO B CELL FOLLICLES IN LYMPH NODES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHAIN
                                                                                                     KODELJA V., MUELLER C., SUBMITTED (AUG-1997) TO
                                                                                                                                                  HIESHIMA K., IMAI T., BABA M., SHOUDAI K., ISHIZUKA K., NAKAGAWA T., TSURUTA J., TAKEYA M., SAKAKI Y., TAKATSUKI MIURA R., OPDENAKEER G., VAN DAMME J., YOSHIE O., NOMIYAM J., IMMUNOL. 159:1140-1149(1997).
                                                                                                                                                                                      TISSUE-AORTA, AND LUNG;
MEDLINE; 97376836.
                                                                                                                                                                                                                                                                                                   HOMO SAPIENS (HUMAN)
EUKARYOTA; METAZOA; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                            PATENT NUMBER US5504003
                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                        EUTHERIA; PRIMATES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MIM;
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C-C) (CHEMOKINE CC).
BL; X99886; E279930; ALT_I
BL; Y10802; E294088; -.
SP; P13500; 1MCA.
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TISSUE SPECIFICITY: HIGHEST EXPRESSION FOUND IN THE SMALL
INTESTINE AND PERIPHERAL BLOOD CELLS: INTERMEDIATE LEVELS SEEN
THE HEART, PLACENTA, LUNG, SKELETAL MUSCLE, THYMUS, COLON, OVAR
SPINAL CORD AND PANCREAS. LOW LEVELS SEEN IN THE BRAIN, LIVER,
                                                                                                                                                                                                                                                                                                                                                                                                                                 30
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  TISSUE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EVCADPKERWVR
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                                                                                                                                                                                                                                                        RUBEN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHEMOTAXIS;
  SPECIFICITY:
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KIS; SIGNAL; HEPARIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         74.3%;
58.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11246
                                                                                                                                                                                                                                                                                                    CHORDATA;
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24
59
75
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  EXPRESSED
                                                                                                     POLITZ O., HAKIY N., ORFANOS EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 75; DB 1;
Pred. No. 1.85e-04
4; Mismatches
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MONOCYTE CHEMOTACTIC PRO
PYRROLIDONE CARBOXYLIC A
BY SIMILARITY.
BY SIMILARITY.
K -> Q.
                                                                                                                                                                                                                                                                                                    VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
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HEPARIN-BINDING;
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  HIGH
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 LEVELS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 99;
                     LYMPHOCYTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFLAMMATORY RESPONSE;
  Ï
                                                                                                                                                               NOMIYAMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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THE LUNG. A LOWER
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[7]
                       MIGRATION
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CC LEVEL EXPRESSION IS SEEN IN LYMPHOID TISSUES SUCH AS LYMPH NODES,
CC THYMUS AND APPENDIX.
CC -! INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
CC -! SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC).
CC C-() (CHEMOKINE CC).
DR EMBL; ABO00221; D1022520; -
DR PROSITE; PS00472; SMALL CYTOKINES_CC; 1.
KW CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
ET SIGNAL
T 20
FT CHAIN 21 89
MACROPHAGE INFLAMMATORY PROTEIN 4.
FT DISULFID 31 70
BY SIMILARITY.
SQ SEQUENCE 89 AA; 9849 MW; 052AA3DC CRC32;
QUETY MATCH
BEST LOCAL SIMILARITY 66.7%; Pred. No. 3.14e-04;
MATCHES 8; CONSERVATIVE 2; Mismatches 2; Indels 0; Gaps 0;
Db 68 QICADPNKKWYQ 79
IN EICLDPKGKWYQ 12
Search completed: Thu Apr 1 07:33:57 1999
Job time: 9 secs.
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1 79 78.2 97 6 062812 INTERLEUKIN-8 (FRAGMEN S.88e-05 74 73.3 395 11 035188 NEUROTACTIN PRECURSOR 8.15e-04 74 73.3 395 11 035188 NEUROTACTIN PRECURSOR 8.15e-04 74 73.3 395 11 035188 NEUROTACTIN PRECURSOR 8.15e-04 74 73.3 395 11 035933 FRACTALKINE. 8.15e-04 8.15e-04 91 4 0000175 MPIF-2. 6.31e-03 6.31e-03 97 11 089093 CC CHEMOKINE EXODUS- 1.04e-02 96 68.3 97 21 088430 CC CHEMOKINE EXODUS- 1.04e-02 96 68 67.3 109 11 055038 B LYMPHOCYTE CHEMOATTR 1.72e-02 11 65 64.4 96 11 073912 K60 PROTEIN PRECURSOR. 2.82e-02 12 65 64.4 96 11 099664 CHEMOKINE EXODUS- 7.51e-02 13 65 64.4 96 11 997884 CC CHEMOKINE EXODUS- 7.51e-02 14 05503 CC CHEMOKINE EXODUS- 7.51e-02 15 63 62.4 101 13 093442 CC CHEMOKINE EXODUS- 7.51e-02 16 62 61.4 91 4 043646 CC CHEMOKINE EXODUS- 7.51e-02 16 60 59.4 991 4 043646 RANTES PRECURSOR- 5.06e-01 19 60 59.4 203 14 067634 ECO Q PROTEIN (FRAGMEN 8.07e-01	Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.  SUMMARIES  Pesult Ouery Pesult Ouery Pesult Ouery Description Ouery Pred. No.	8 8 rchea 2:sp nvertebrat hage 10:sp vertebrate 692; Vari	Title: VUS-08-927-939-10 Description: (1-12) from US08927939.pep Perfect Score: 101 Sequence: 1 EICLDPKQKWVQ 12 Scoring table: PAM 150 Gap 15 Searched: 180763 seqs, 55169189 residues Post-processing: Minimum Match 0% Listing first 100 summaries	Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd  MPsrch_pp protein - protein database search, using Smith-Waterman algorithm Run on:  Thu Apr 1 07:34:15 1999; MasPar time 4.93 Seconds  Tabular output not generated.
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CLASS I HEAVY CHAI 2.	HETICAL PROTEIN C 1.8 A 1. 1.6 MYBP-C. 1.6 1.2. 1.9 1.10 INE SYNTHETASE 1.8 B (FRAGMENT). 2.7 LASS I HEAVY CHAI 2.7 LASS I HEAVY CHAI 2.7 LASS I HEAVY CHAI 2.7	CLASS I HEAVY CHAI 1. STRUCTURAL PROTEIN 1. STRUCTURAL PROTEIN 1. STRUCTURAL PROTEIN 1. STRUCTURAL PROTEIN 1. OTHETICAL 37.2 KD P 1. OCLASS I ALLELE SHN 1. PROTEIN (FERAG 1.	D2.8 PROTEIN. 1. UL154. 1. NUSCRIPTION FACTOR. 1. T3. 1. L2 RECEPTOR BETA2. 1. ELOPE PROTEIN. 1. A0462 PROTEIN (FRAG 1. A0462 PROTEIN (FR	CIBEL DIVISION INOL-BINDING ROTEIN. ISEASE RESIS GENE HOMOLO IV COSMID 9 I A COSMID

EUTHERIA; RODENTIA;

O J., VATH brain

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RESULTION OF THE STATE OF THE S
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ID 052812;

AC 062812;

DT 01-AUG-1998 (
DT 01-AUG-1998 (
DT 01-AUG-1998 (
DT 01-AUG-1998 (
DE INTERLEUKIN-8

GN IL-8.

OS EQUUS CABALLU

OC EUKARYOTA; ME

OC PERISSODACTYL

RN [1]

RP SEQUENCE FROM

RC TISSUE-BRONCH

RA FRANCHINI M.

RL SUBMITTED (AP

DR EMBL; AF06237

FT NON_TER

SO SEQUENCE 97
           RESULT 3
ID 035188
AC 035188;
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Best Local S
Matches
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Best Local S
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O57411;

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O1-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)

O1-JUN-1998 (TREMBLREL. 06, LAST ANNOTATION UPDATE)

O1-JUN-1998 (TREMBLREL. 06, LAST ANNOTATION UPDATE)

LYMPHOTACTIN PRECURSOR.

GALLUS GALLUS (CHICKEN).

GALLUS GALLUS (CHICKEN).

EUKARYOTA; METAAOA; CHORDATA; VERTEBRATA; ARCHOSAURIA; AVES;

EUKARYOTA; METAAOA; CHORDATA; VERTEBRATA; ARCHOSAURIA; AVES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95
95
96
98
98
98
98
98
                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
TISSUE-SPLEEN;
ROSSI D.L., BAZAN J.F., ZLOTNIK A.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF006742; G2827882; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE-BRONCHOALVEOLAR TISSUE;
FRANCHINI M.;
SUBMITTED (APR-1998) TO EMBL/G:
EMBL; AF062377; G3126973; -.
NON_TER 97 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EQUUS CABALLUS (HORSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
PERISSODACTYLA; EQUIDAE; EQUUS.
                                                                                                                                                                                                                                                                                                                                                 SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-AUG-1998 (TREMBLREL. 07, 01-AUG-1998 (TREMBLREL. 07, 01-AUG-1998 (TREMBLREL. 07, INTERLEUKIN-8 (FRAGMENT).
                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                               SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         y Match 78.2%;
Local Similarity 66.7%;
hes 8; Conservative
                                                                                                                                      72 ICVHPEQKWVQ
                                                                                                                                                                                                  Local Similarity
nes 8; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  75
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EICLDPKQKWVQ 12
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                                                                                                              ICLDPKQKWVQ
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51.5
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                                                                                                                                                                                                                                                                                   97 AA;
                              PRELIMINARY;
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                                                                                                                                                                                                                                                                                                            25
                                                                                                                                                                                                  Conservative
                                                                                                                                                        82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      357
362
425
517
1014
1224
2919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10742 MW;
                                                                                                                                                                                                                      73.3%;
72.7%;
                                                                                                                                                                                                                                                                                      11131 MW;
                                                                                                                                                                                                                                                                                                              24
97
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Q30304
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Q04007
Q50018
Q26152
P91309
Q85431
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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                                                                                                                                                                                             Score 74; DB 13;
Pred. No. 8.15e-04;
1; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 79; DB 6; 1
Pred. No. 5.88e-05;
2; Mismatches
                                                                                                                                                                                                                                                                               POTENTIAL.
LYMPHOTACTIN.
3290101C CRC32;
                              PRT;
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                              395
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MHC CLASS I LYMPHOCYTE
PHYTOENE SYNTHASE.
COSMID B1764.
V-SERA 2.
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                                                                                                                                                                                                                                       Length 97;
                                                                                                                                                                                                  Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97;
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2.79e+01
2.79e+01
2.79e+01
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2.79e+01
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    TRESULT COLOR OF THE SOULT COLOR
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Best Local
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Best Local
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EMBL; AF010586; G2317698; -
MGD; MGI:1097153; SCYD1.
PFAM; PF00048; 118; 1.
SEQUENCE 395 AA; 42098 M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       035933
035933;
01-JAN-1998
01-JAN-1998
01-NOV-1998
                                                                                                                                                 JLT 5
000175
000175;
01-JUL-1997
01-JUL-1997
01-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FRACTALKINE. (MOUSE).
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
[1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ROSSI D., HARDIMAN G., COPELAND N., GILBER ZLOTNIK A., BAZAN J.F.; SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ EMBL; U92565; G2459677; -. PFAM; PF00048; 118; 1. SEQUENCE 395 AA; 42040 MW; 3997Al13 CR
SEQUENCE FROM N.A. PATEL V.P., KREIDER
                                                                  HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                      MPIF-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 97320499.

PAN Y. CLARE L., HONG Z., DOLICH S., I
GOSSELIN M., MA J., DUSSAULT B., WOOLF
GUTIERREZ-RAMOS J.C., GEARING D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE; 97320499.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SCYD1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JAN-1998 (TREMBLREL.
01-JAN-1998 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
NEUROTACTIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN-BALB/C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                   73 FCADPKEKWVQ 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73 FCADPKEKWVQ 83
:| |||:||||
2 ICLDPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                           2 ICLDPKQKWVQ
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Similarity 72.7%;
8; Conservative
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                                                                                                                                                 (TREMBLREL.)
(TREMBLREL.)
                                                                                                                                                                                                                                                                                                                                                                                                           73.3%;
larity 72.7%;
Conservative
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                                                                                                                                                                                                                                       PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1:
42040 MW;
  B.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COPELAND N., GILBERT D.J., JENKINS
                                                                                                                                                   04,
08,
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
                                                                                                                                                 CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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2; N
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Pred. No. 8.15e-04;
2; Mismatches 1
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Pred. No. 8.15e-04;
  Υ.,
                                                                                      VERTEBRATA;
                                                                                                                                                                                                                                       PRT;
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    Ľ
    Ή.,
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F B., ALPERIN A., (
      LEUNG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A
                                                                                      MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DATA
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    ×.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 395;
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Best Local S
                                                                                                                                                                                                                                                                                OOO585;
OOO585;
OI-JUL-1997 (TREMBLREL. 04, CREATED)
OI-JUL-1997 (TREMBLREL. 04, LAST SEQUE
OI-NOV-1998 (TREMBLREL. 08, LAST ANNOT
BETA CHEMOKINE EXODUS-2.
HOMO SAPLENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 7; Consei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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GENTZ R., GAROTTA G.,
J EXP MED. 0:0-0(0).
EMBL; U85768; G1916252; -.
PFAM: PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           O89093 PRELIMINARY; PRT; 97 AA.
089093;
01-NOV-1998 (TREMBLREL. 08, CREATED)
01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
CC CHEMOKINE ST38 PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUBMITTED (JUL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS EMBL; AF053313; G3551819; -. EMBL; AJ007862; E1312757; -.
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
MEDLINE; 97400322.
HEDRICK J.A., ZLOTNIK A.;
"Identification and chara
                                                                                                                                                                SUBMITTED
                                                                                                                                                                                          SEQUENCE FROM
HROMAS R.A., (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
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                                                                                                   SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity es 8; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    splay, is upregulated in brain inflammation."; NEUROIMMUNOL. 0:0-0(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 EICLDPKQKWVQ
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                                                                                                                                                                (JUN-1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
                                                                                                                                                                                       GRAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1
28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27
97
10826 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  68.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13119 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                69.3%;
   characterization of
                                                                                                                                                          TO EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENTZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 identified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 70;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 69; DB 11;
Pred. No. 1.04e-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      POTENTIAL.
CC CHEMOKINE ST38.
053405BD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2
                                                                                                                                                                                                                                                                                                             VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDF526F0
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                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE UPDATE)
ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 4; Leng. 6.31e-03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 by targeted differential
   ω
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MAMMALIA;
MUS.
   novel
                                                                                                                                                          BROXMEYER :
DATA BANKS
                                                                                                                                                                                                                                                                                                                 MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DA SILVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 119;
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   beta chemokine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EUTHERIA;
                                                                                                                                                                                                                                                                                                                 EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
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                                                                                                                                                                                                                                                                                                                 PRIMATES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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OTNOV-1998 (TREMBLREL 08 DE CC CHEMOKINE ABCD-1.

OS MUS MUSCULUS (MOUSE).

OS TRARYOTA; METAZOA; CHORYTROGNATHI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
    RRRRR OCCUPATION
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Best Local S
Matches
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Best Local Similarity
Matches 8; Conser
SEQUENCE FROM N.A. STRAIN=C57BL/6J; MEDLINE; 98146056. GUNN M.D., NGO V.N.,
                                                                                                                             O55038 PRELIMINARY; PRT; 109 AA.
O55038;
O1-JUN-1998 (TREMBLREL. 06, CREATED)
O1-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
O1-WOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
B LYMPHOCYTE CHEMOATTRACTANT BLC.
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA: CHORDATA, VERTEBRATA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NISHIMURA M., KAKIZAKI M., NOMIYAMA H., YOSHIE O.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; 080320; G216920; -.
EMBL; 080320; G216920; -.
EMBL; AF001979; G2624925; -.
EMBL; AB002409; D1022673; -.
EMBL; AB002409; D1022673; -.
PFAM; PF00048; 118; 1.
PFAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CC chemokine which acts selectively on activated T cells.";
J. EXP. MED. 188:451-463(1998).
EMBL; AF052505; G3378116; -..
SEQUENCE 03 8...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 98353531.
SCHANIEL C., PARDALI E.,
SHIMIZU T., SEIDL T., AND
SIDERAS P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HEDRICK J.A., ZLOTNIK
SUBMITTED (MAY-1997) T
                                                                                                                 SCIUROGNATHI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             73 ELCADPKELWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                      74 DICADPROVWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EICLDPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                           EICLDPKQKWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                67.3%;
llarity 63.6%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                    MURIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                      84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10302 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               68.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHORDATA; VERTEBRATA; FHI; MURIDAE; MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TO EMBL/GENBANK/DDBJ DATA BANKS
    ANSEL K.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E., SALLUSTO F.,
ANDERSSON J., M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Α.;
                                                                                                                 MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8,8,8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 68; DB 11; Lo
Pred. No. 1.72e-02;
2; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 69; DB 4; 1
Pred. No. 1.04e-02;
2; Mismatches
                                                                                                                 VERTEBRATA;
E; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BC7219A0 CRC32;
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    EKLAND E.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ., SPELETAS M., MELCHERS F., R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          92
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MUS.
    CYSTER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
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                                                                                                                                         EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EUTHERIA;
    J.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92
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RESULT
AC Q1
AC Q1
AC Q1
DT Q1
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Best Local Similarity
Matches 7; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local :
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014745;
014745;
01-NOV-1996
01-NOV-1996
01-NOV-1998
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073912
073912;
01-AUG-1998
01-AUG-1998
01-AUG-1998
                                                                                                               PFAM; PF
SIGNAL.
NON_TER
     NON_TER
SEQUENCE
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EUKARYOTA; METAZOA; CHORDATA;
NEDGNATHAE; GALLIFORMES; PHAS
                                                                                                                                                                                       EMBL; D63785; G961440; -. PROSITE; PS00472; SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LD78 ALPHA BETA PRECURSOR (FRAGMENT).
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
TISSUE-MACROPHAGE LIKE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         K60
                                                                                                                                                                                                                                                                                                          ISHIZUKA K., IGATA-YI
KATSURAGI S., KIN Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUBMITTED (AUG-1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SICK C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  K60 PROTEIN
                                                            CHAIN
                                                                                           SIGNAL
                                                                                                                                                                                                                                                      SUBMITTED (AUG-1995) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                   МІҮАКАЖА Т.
                                                                                                                                                                                                                                                                                                                                                                      TISSUE=BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATARRHINI; HOMINIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                74 ICVNPRAKWLQ 84 ||::|: ||:| 2 ICLDPKQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          75 EVCLDPTAPWV 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
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                                                                                                                                                                         PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Y14971; E1295103; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       h 67.3%;
Similarity 54.5%;
6; Conservative
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21
104 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TREMBLREL.) (TREMBLREL.
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17
80
8A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TREMBLREL. 01, CREATED)
(TREMBLREL. 01, LAST SEQUENCE UPDATE)
(TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           66.3%;
llarity 63.6%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRELIMINARY;
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104
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8857
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                                                                                                                                                                                                                                                                                                          R., NARUSE
OHMOTO Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07, CREATED)
07, LAST SEQUENCE UPDATE)
07, LAST ANNOTATION UPDATE)
        W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PHASIANIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 68;
Pred. No.
4; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 67; DB 13;
Pred. No. 2.82e-02;
1; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  K60 PROTEIN.
     3F87F1C6 CRC32;
                                                                                     POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERTEBRATA; ARCHOSAURIA; AVI
IANIDAE; PHASIANINAE; GALLUS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
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                                                                                                                                                                                                                                                                                                       NOMIYAMA H., IIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                            ALPHA BETA
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1.72e-02;
-hos 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      104
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                                                                                                                                                                                                                                                                                                            IIO M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 104;
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                                                                                                                                                                                                                                                                                                                                         OHUCHI K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                                                                               MIURA R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AVES;
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RESULTATION OF THE PROPERTY OF
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Best Local S
Matches
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Best Local :
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PRELIMINARY;
P97884;
01-MAY-1997 (TREMBLREL. C
01-MAY-1997 (TREMBLREL. C
01-NOV-1998 (TREMBLREL. C
CC CHEMOKINE EXODUS.
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Q99664;
Q1-MAY-1997;
Q1-MAY-1997;
Q1-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
STRAIN=SPRAGUE-DAWLEY;
KELNER G.S., MACIEJEWSKI-LENOIR D., LEE E.
KELNER G.S., MACIEJEWSKI-LENOIR D., LEE E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-NOV-1998 (TREMBLREL.
CHEMOKINE EXODUS.
                                                         SIGNAL.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CC CHEMPANAME (RAT).

RATTUS NORVEGICUS (RAT).

EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;

EUKARYOTA; METAZOA; CHORDATA; RATTUS.
                                                                                                            PFAM;
                                                                                                                                       "A novel rat CC chemokine, identified by targeted display, is upregulated in brain inflammation."; J. NEUROIMMUNOL. 0:0-0(1998).
EMBL; U90447; G1899246; -.
EMBL; AF053312; G3551817; -.
                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. STRAIN-FISHER 344; UTANS-SCHNEITZ U.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Cloning and characterization of exodi
BLOOD 89:3315-3322(1997).
EMBL; U64197; G1778717; -
PROSITE: PS00472; SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 97275143.
HROMAS R., GRAY P.W.,
BELL G.I., TAKEDA J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CH
CATARRHINI; HOMINIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PFAM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KLEMSZ M.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE-PANCREAS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                           LESSLAUER W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      72 VCANPKQTWV : | : | | | | | |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 ICLDPKQKWV
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                                                                                                               PF00048;
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Similarity 50.08;
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                                                         AA;
                                                                                                                  118;
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                                                                                                                                                                                                                                                                                                                TISSUE-BRAIN;
LOREZ H., KLINKERT W.E.F.,
                                                         10875 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               64.48;
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ARONICA
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Pred. No. 7.
3; Mismatc
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Pred. No. 7.51e-02;
2; Mismatches 2
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                                                         3FC09DD8 CRC32;
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7.51e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                     E.D., MAKI R.A.;
BJ DATA BANKS.
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                                                                                                                                                                                                                                                                                                                      DA SILVA J.,
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96;
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BROXMEYER
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Query Match

Score 65;

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) 093442; PRELIMINAKI,

C 093442; PRELIMINAKI,

T 01-NOV-1998 (TREMBLREL 08, LAST SEQUENCE DT 01-NOV-1998 (TREMBLREL 08, LAST ANNOTATI DE LFCA-1 PROTEIN PRECURSOR.

OS LAMPETRA FLUVIATILIS (RIVER LAMPREY).

OS LAMPETRA METAZOA; CHORDATA; VERTEBRATI

"""KARYOTA; METAZOA; CHORDATA; VERTEBRATI
"""KARYOTA; METAZOA; PETROMYZONTIDAE; LA
ACCOCK SECOND DESCRIPTION OF SECOND DESCRIPT
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015467 PRELIMINARY;
015467;
01-JAN-1998 (TREMBLREL 0
01-JAN-1998 (TREMBLREL 0
01-JAN-1998 (TREMBLREL 0
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SEQUENCE
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ILINCK OR SCYA16.
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
 TISSUE-LEUKOCYTES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PFAM; PF00048; il8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; AB007454; D1024963; -. EMBL; AF088219; G3719365; -. EMBL; AF055467; G3395776; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BIOCHEM. BIOPHYS. RES. COMMUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      monocyte chemoattractant human
activity.":
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE; 98308096.
YOUN B.S., ZHANG S., BROXMEYER HANGOC G., KWON B.S.;
"Isolation and characterization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUBMITTED (AUG-1998)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HEDRICK J.A., HELMS A., SUBMITTED (NOV-1997) TO
                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              activity.
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                                                                                                                                                                                                                                                                                                        74 EVCTNPNDDWVQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of 181 kb containing five CC chemokine genes."; O EMBL/GENBANK/DDBJ DATA BANKS.
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EMBL/GENBANK/DDBJ I
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                                                                     VERTEBRATA;
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ANNOTATION UPDATE)
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chemokine, with myelosuppressive
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DATA
                                                                       CEPHALASPIDOMORPHI;
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                                                                                                                                 UPDATE)
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                                                                                                                                                                                                                                                                                                                                                                                                 Length 120;
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043646; OTREMBLREL. (
01-JUN-1998 (TREMBLREL. (
01-JUN-1998 (TREMBLREL. (
01-NOV-1998 (TREMBLREL. (
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093238;
01-NOV-1998 (TREMBLREL 08, CREJ
01-NOV-1998 (TREMBLREL 08, LAS;
01-NOV-1998 (TREMBLREL, 08, LAS;
CC CHEMOKINE-1.
CYPRINUS CARPIO (COMMON CARP).
                                 "Structure of a region of 1
SUBMITTED (AUG-1998) TO EMBL
EMBL; AF0843341; G290563; -
EMBL; AF088219; G3719366; -
PROSITE; PS00472; SMALL_CYT
                PROSITE;
SIGNAL.
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                                                                                                                                                                                                                      SEQUENCE FROM N.A. JANG J.S., KIM B.E
                                                                                                                                                                                                                                                                                               HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                              SCYA5
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                                                                                                                                        MAKYIMON
                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                             SUBMITTED (JAN-1998)
                                                                                                                                                                                                                                                                             CATARRHINI; HOMINIDAE;
                                                                                                                                                                                                                                                                                                                                                              RANTES PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FUJIKI K.,
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'DNA clouing of a carp CC chemokine homologous
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                                                                                                                                                                                                                      B.E.;
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                                   SMALL_CYTOKINES_CC;
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63.6%;
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                                                                                              of 181 kb containing five CC OEMBL/GENBANK/DDBJ DATA BANKS
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Pred. No. 1.97e-01;
3; Mismatches 3
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2; 1
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LFCA-1 PROTEIN.

E4A1E20F CRC32;
POTENTIAL
                                                                                                                                                                                                                                                                                                    VERTEBRATA;
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1. No. 3.16e-01;
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01-JUN-1998
01-NOV-1998
  SEQUENCE;
                                                       KAPOSI'S SARCOMA-ASSOCIATED HERPESVIRUS VIRUSES; DSDNA VIRUSES, NO RNA STAGE; HI GAMMAHERPESVIRINAE; RHADINOVIRUS.
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BAGGIOLINI M., MOSER B.;
BAGGIOLINI M., MOSER B.;
B cell-attracting chemokine 1, a human CXC chemokine expressed in
B cell-attracting chemokine 1 attracts B lymphocytes via BLR1/CXCR5.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GUNN M.D., NGO V.N., WILLIAMS L.T.;
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EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
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larity 41.7%;
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4; Mismatches
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EMBL; U75698; G1718266; -.
EMBL; U74885; G1558273; -.
EMBL; U93872; G2246546; -.
EMBL; U71366; G3551763; -.
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Q67634
Q67634;
                                                                                                                                                                                                                                                          GALLID HERPESVIRUS TYPE 1. VIRUSES; DSDNA VIRUSES, NO RNA STAGALPHAHERPESVIRINAE; VARICELLOVIRUS.
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SEQUENCE FROM N.A., CHIEN M.C., CHEN J., YAN M., MADDALENA RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.; PARRY J.P., PERUZZI D., EDELMAN J.S., CHANG Y., MOORE P.S.; SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
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SCIENCE 274:1739-1744(1996).
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PARRY J.P.,
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"Isolation and characterization mapping to the BamHI-I2, BamHI-C
                                                                SHIRAZI
                                                                                              MEDLINE; 96074534.
PENG Q., ZENG M.,
                                                                                                                                                                     STRAIN-GA;
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"Cell-homologous genes in the Kapo
human harpesvirus 8: determinants
J. VIROL. 71:4187-4192(1997).
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"Molecular mimicry of h
                                                                                                                                                                                                SEQUENCE FROM N.A.
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HETICAL PROTEIN
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                                                                                           ZENG M., BHUIYAN
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, PERUZZI D., EDE:
(OCT-1996) TO EMB:
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larity 50.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WEISS R.A., CHANG Y.;
lzation of Marek's disease virus (MDV) cDNAs
BamHI-Q2, and BamHI-L fragments of the MDV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  G.;
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                                                                                           Z.A.,
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LAST SEQUENCE UPI
LAST ANNOTATION (
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Pred. No. 8.07e-01;
3; Mismatches 3;
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                                                                                              UBUKATA E.,
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                                                                                                 TANAKA
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herpesvirus
                                                                                                 NONOYAMA M.,
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Best Local Similarity
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Best Local
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000626

000626;

01-JUL-1997 (TREMBLREL. 04

01-JUL-1997 (TREMBLREL. 04

01-NOV-1998 (TREMBLREL. 04
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p78423; PRELIMINARY;
p78423; 000672;
p78423; 010672;
01-MAY-1997 (TREMBLREL 03
01-MAY-1997 (TREMBLREL 03
01-NOV-1998 (TREMBLEL 08
CX3C CHEMOKINE PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           genome from lymphoblastoid cells transformed and persistently infected with MDV.";
VIROLOGY 213:590-599(1995).
EMBL; U34966; G1185444; -.
PFAM; PF00048; i18; 1.
NON_TER 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.

MEDLINE; 97177111.

BAZAN J.F., BACON K.B., HARDIMAN G., WANG W., SOO K.,
GREAVES D.R., ZLOTNIK A., SCHALL T.J.;
"A new class of membrane-bound chemokine with a CX3C
NATURE 385:640-644(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                             MACROPHAGE-DERIVED CHEMOKINE MDC OR A-152E5.1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Homo sapiens Chromosome 16
SUBMITTED (JUN-1998) TO EME
EMBL; U91835; G1899259; -.
EMBL; U84487; G1888523; -.
  SEQUENCE FRO
                                                                CATARRHINI;
                                                                                                            OMOH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; AC004382; G3252821; -. PFAM; PF00048; il8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J., BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.; "Homo saplens Chromosome 16 BAC clone CI1987SK-A-152E5.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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                                                        SAPIENS (HUMAN).
SAPIENS (HUMAN).
RYOTA; METAZOA; CHORDATA;
RRHINI; HOMINIDAE; HOMO.
FROM N.A.
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397
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203 AA; 23132 MW;
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397
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                                                                                                                                                         04, CREATED)
04, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE
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RAPORT C.J.,
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Pred. No. 8.07e-01
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CX3C CHEMOKINE.
; C8093D7D CRC32;
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SOZZANI S.,
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8.07e-01
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                                                                                                                                                                    UPDATE)
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                                                                                EUTHERIA;
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                                                                                  PRIMATES
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Matches
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Best Local Similarity
Matches 6; Conser
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01-NOV-1998
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SEQUENCE
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUL-1997 (TREMBLREL. 04,
01-AUG-1998 (TREMBLREL. 07,
01-NOV-1998 (TREMBLREL. 08,
BETA CHEMOKINE EXODUS-2.
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SEQUENCE FROM N.A.

ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J.,

BRANDON R., KIM U.J., KERLANVAGE A.R., VENTER J.C.;

BRANDON R., FUHRMANN J.,

BRANDON R., KIM U.J., KERLANVAGE A.R., VENTER J.C.;

BRANDON R., KERLANVAGE A.R
                                                                                                                                                                                                                                                                                                                                                                                                                   SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ
EMBL; U88322; G3169697; -.
MGD; MG1:1097677; SCYA21.
PFAM; PF00048; 118; 1.
SEQUENCE 133 AA; 14600 MW; B34A5E22 CF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HROMAS R., KIM C.H., KLEMSZ M., KRATHWOHL M., FIFE K., COOPER S., SCHNIZLEIN-BICK C., BROXMEYER H.E.;
"ISOlation and characterization of Exodus-2, a novel C-C chemokine with a unique 37-amino acid carboxyl-terminal extension.";
J. IMMUNOL. 159:2554-2558(1997).
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SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS
EMBL; U83171; G1931581; -
EMBL; U83239; G2062425; -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MANTOVANI A.,
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                                                                                                                                                                   EICLDPRQKWVQ
                                                                                                                                                                                                       ELCANPEEGWVQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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93 AA;
                                                                                                                                                                                                                                                                                    58.4%;
llarity 50.0%;
Conservative
                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         84
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93
10580
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                                                                                                                                                                                                                                                                                    Score 59; DB 11;
Pred. No. 1.28e+00;
3; Mismatches 3
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
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Pred. No. 1.28e+00;
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MACROPHAGE-DERIVED CHEMOKINE
65EA63D2 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ., KRATHWOHL H.E.;
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                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                      B34A5E22 CRC32;
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                                                                                                                                                                                                                                                                                           ω,
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RESULT 25

ID 002426

AC 002442;

DT 01-JUL-1997 (
DT 01-JUL-1997 (
DT 01-NV-1998 (
DE SNAIL HOMOLOG
GN CI-SNAIL.

OS CIONA INTESTI
OC EUKARYOTA; ME
OC CIONIDAE; CIC
RN [1]
CC GIONIDAE; CIC
RN [2]
RP SEQUENCE FROM
RP CORBO J.C., E
RL DEVELOPMENT 0
DR EMBL; AF00298
DR PROSITE; PS00
DR PFAM; PF00096
KW ZINC-FINGER;
SO SEQUENCE 58
RESULT OF AC OF
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Best Local S
Matches
                                                                                                                                                                                                                                      Query Match
Best Local :
                                                                                                                                                                                                                Matches
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MEDLINE; 97400322.

HEDRICK J.A., ZLOTNIK A.;

"Identification and characterization of containing six conserved cysteines.";

TMMUNOL. 159:1589-1593(1997).
O82387;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORBO J.C., ERIVES A., DI GREGORIO A., C
DEVELOPMENT 0:0-0(0).
EMBL; AF002987; G2196753; -.
PROSITE; PS00028; ZINC_FINGER_C2H2; 4.
PFAM; PF00096; Zf-C2H2; 5.
ZINC_FINGER; METAL-BINDING; DNA-BINDING.
SEQUENCE 584 AA; 64756 MW; B1DE5647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUBMITTED (MAY-1997) TO EMBL
EMBL; AF006637; G2209189; -.
EMBL; AF001980; G2624927; -.
MGD; MGI:1097677; SCYA21.
PFAM; PF00048; i18; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TANABE S., LU Z., LUO Y., QUACKENBUSH E.J., BERMAN M.A., COLLINS-RACIE L.A., MI S., REILLY C., LO D., JACOBS K.A., SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUL-1997 (TREMBLREL. 04, CREATED)
01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UP
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION
SMALL INDUCIBLE CYTOKINE A21 (TCA4).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CIONIDAE; CIONA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CIONA INTESTINALIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SNAIL HOMOLOG.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HEDRICK J.A., ZLOTNIK A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-THYMUS;
                                                                                                                                                                 397 VCLDSKTTWRQ 407
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                                                                                                                                                                                                                Similarity 6; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        133 AA;
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                        PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           58.4%;
larity 50.0%;
Conservative
                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                      58.48;
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08,
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                                                                                                                                                                                                             Score 59; DI
Pred. No. 1.:
2; Mismatcl
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Pred. No. 1.28e+00;
3; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              UROCHORDATA; ASCIDIACEA; PHLEBOBRANCHIA;
                        PRT;
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                                                                                                                                                                                                                                                                                                          B1DE5647 CRC32;
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                                                                                                                      Query Match
Best Local S
Matches
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Best Local
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"SUBMITTED (SEP-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AC005496; G3582344; -.
CELL DIVISION.
SEQUENCE 535 AA; 59484 ***
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P70357;
P70357;
01-FEB-1997 (
01-FEB-1997 (
01-NOV-1998 (
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DISULFID
SEQUENCE
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MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
COTUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                          LIPOCALIN.
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHAIN
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01-FEB-1997 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
PLASMA RETINOL-BINDING)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ARABIDOPSIS THALIANA (MOUSE-EAR CRESS).

EUKARYOTA; VIRIDIPLANTAE; CHAROPHYTA/EMBRYOPHYTA GROUP; EMBRYOF
TRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA;
EUDICOTYLEDONS; ROSIDAE; CAPPARALES; BRASSICACEAE; ARABIDOPSIS.
                                                                                                                                                                                                                                                                                                                                                                                                                           PLASMA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN-B6/CBAFIJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                        176 ELCLERQYRWIE
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   1 EICLDPKQKWVQ
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ilarity 55.6%;
Conservative
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                                                                                                                      Conservative
                                                                                                                                                                                                                                            ΑA,
                                                           187
      12
                                                                                                                                                                                                                                      18
201
178
147
23206
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     . 08, CREATED)
. 08, LAST SEQUENCE UPDATE)
. 08, LAST ANNOTATION UPDATE)
PROTEIN:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROTEIN PRECURSOR (PRBP)
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02, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                            MW;
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Pred. No. 2.
2; Mismatc
                                                                                                                                                                                                                                                         BY SIMILARITY.

PLASMA RETINOL-BINDING P
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                Score 57; DB 11;
Pred. No. 3.17e+00;
5; Mismatches 3
                                                                                                                                                                                                                                      AA915F05
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 10; L-
2.02e+00;
2;
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                                                                                                                                                                                                                                         CRC32;
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                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                        LIVER;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 535;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (RBP).
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                                                                                                                   Indels
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                                                                                                                                                                                                                                                                                                                                 PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL;
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                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                      0;
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RESULT 28 ID 017348 AC 017348;

PRELIMINARY;

PRT;

331

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3

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Best Local S
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q99126;
Q99126;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.

STRAIN-BRISTOL N2:

MEDLINE; 94150718.

WILSON R., AINSCOUGH R., ANDERSON K., BAYNES C., BERKS M., BONFIELD J.,

BURTON J., CONNELL M., COPSEY T., COOPER J., COULSON A., CRAXTON M.,

BURTON J., CONNELL M., FAVELLO A., FULTON L., GARDNER A., GREEN P.,

HAWKINS T., HILLIER L., JIER M., JOHNSTON L., JONES M., KERSHAW J.,

KIRSTEN J., LAISTER N., LARREILLE P., LIGHTNING J., LLOYD C.,

KIRSTEN J., LAISTER N., LARREILLE P., LIGHTNING J., LLOYD C.,

MCMURRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,

RIFKEN L., ROOPRA A., SAUNDERS D., SHOWNKEEN R., SMALDON N., SMITH A.,

SONNHAMMER E., STADEN R., SULSTON J., THIERRY-MIEG J., THOMAS K.,

VAUGHAN K., WATERSTON R., WATSON A., WEINSTOCK L.,

WILKINSON-SPROAT J., WOHLDMAN P.,
                                                                                                                                                                                    SEQUENCE FROM N.A.
STRAIN=RK32 (A2B3);
XOCONOSTLE-CAZARES B., LEON-RAMIREZ
MICROBIOLOGY 142:377-387(1996).
EMBL; X87748; G861151; -.
SEQUENCE 760 AA; 85181 MW; 2F24C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-1996 (TREMBLREL.
01-NOV-1996 (TREMBLREL.
01-MAY-1997 (TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBMITTED (SEP-1997) TO EMBL/GENBANK/DDBJ DATA BANKS EMBL; AF026207; G2435555; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
STRAIN-BRISTOL N2;
MAGGI L., HARPER M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RHABDITINA; [1]
                                                                                                                                                                                                                                                                                                                                                           USTILAGO MAYDIS (SMUT FUNGUS).
EUKARYOTA; FUNGI; BASIDIOMYCOTA; US
USTILAGINOMYCETIDAE; USTILAGINALES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
STRAIN-BRISTOL N2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MAGGI L., HARPER M.;
SUBMITTED (OCT-1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAENORHABDITIS ELEGANS.
EUKARYOTA; METAZOA; NEMATODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHITIN SYNTHETASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NATURE 368:32-38(1994).
                         483 EICAETKGKW 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    126 NVCLSPERRW 135
                                                                                                                    Local Similarity
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  EICLDPKQKW
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                                                                                             Conservative
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  10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DDA; SECERNENTEA; RHABDITIA; RHABDITIDA; RHABDITIDAE; PELODERINAE; CAENORHABDITIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 57; DB 5; I
Pred. No. 3.17e+00;
4; Mismatches 2
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                        Score 57; DB 3; Length 760; Pred. No. 3.17e+00; 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                           2F24C4C9 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EA4C85EB CRC32;
                                                                                                                                                                                                                                                                                                                                                              USTILAGINOMYCETES; ES; USTILAGINACEAE;
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                                                                                                                                                                                                                                                                  RUIZ-HERRERA
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RESULT 30

O64975;
AC 064975
DT 01-AGG-1998 (TREMBLREL. 07, CREATED)
DT 01-AGG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
DT 01-AGG-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
DT 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
DE PUTATIVE DISEASE RESISTANCE PROTEIN (FRAGMENT).
OC SARABIDOPSIS THALIANA (MOUSE-EAR CRESS)
OC EUNARYOTA; VIRIDIPLANTAE; CHAROPHYTA/EMBRYOPHYTA GROUP; EMBRYOP
OC TRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA, GROUP; EMBRYOP
OC EUDICOTYLEDONS; ROSIDAE; CAPPARALES; BRASSICACEAE; ARABIDOPSIS.
RY
[1]
RP SEQUENCE FROM N.A.
RC STRAIN-CV. LANDSBERG ERECTA;
RX MEDLINE; 98191999.
RAAFTS M.G., TE LINTEL HEKKERT B., HOLUB E.B., BEYNON J.L.,
STIEKEMA W.J., PEREIRA A.;
RT to disease resistance loci in Arabidopsis thaliana.";
MOL. PLANT MICROBE INTERACT. 11:251-258(1998).
FT NON_TER 158 158
SQ SEQUENCE 158 AA; 18235 MW; 12D846C9 CRC32;
                                                                                            δ
V
                                                                                                                                        밁
Search completed: Thu Job time : 31 secs.
                                                                                                                                                                                                 Query Match
Best Local S
                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUDICOTYLEDONS; ROSIDAE; CAPPARALES; BRASSICACEAE; ARABIDOPSIS
[1]
                                                                                                                                     121 CLEPREAW 128
                                                                                            3 CLDPKQKW 10
                                                                                                                                                                                                      Similarity
                                                                                                                                                                                 4;
                                                                                                                                                                                 Conservative
                           Apr
                                                                                                                                                                                                 55.4%;
                             1 07:34:46 1999
                                                                                                                                                                            Score 56; DB 10;
Pred. No. 4.95e+00;
3; Mismatches 1
                                                                                                                                                                                                                        Length 158;
                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                   genetically linked
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBRYOPHYTA;
                                                                                                                                                                                 0;
                                                                                                                                                                                 Gaps
                                                                                                                                                                                 0
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1 92 97.9 67 14 R73915 Human monocyte chemoa 1.23e-02 92 97.9 99 13 R70801 Chemoattractant prote 1.23e-02 32 97.9 109 2 R24353 Cytokine encoded by c 1.23e-02 4 89 94.7 66 24 W13598 Monocyte chemoattract 2.57e-02 6 89 94.7 68 24 W13597 Monocyte chemoattract 2.57e-02 7 89 94.7 69 14 R87678 Monocyte chemoattract 2.57e-02 8 994.7 69 14 R87678 Monocyte chemoattract 2.57e-02 98 994.7 76 14 R87676 (24-Arg) MCP-1. 2.57e-02 12 89 94.7 76 10 R53398 MONOCYTE chemoattract 2.57e-02 12 89 94.7 76 14 R87675 (24-Arg) MCP-1. 2.57e-02 12 89 94.7 76 14 R87675 (24-Arg) MCP-1. 2.57e-02 13 89 94.7 76 14 R87675 (28-Asp) MCP-1. 2.57e-02 16 89 94.7 76 14 R87677 (3-Ala) MCP-1. 2.57e-02 16 89 94.7 76 15 R87680 Monocyte chemotactic 2.57e-02 Mon	Mean 18.171; s the number of equived by analysis ery ery tch Length DB	ost-processing: Minimum Match 0% Listing first 100 summaries atabase: a-geneseg32 lipart1 2:part2 3:part3 4:part4 5:part 8:part8 9:part9 10:part10 11:part11 12 14:part14 15:part15 16:part16 17:part1 19:part19 20:part20 21:part21 22:part2 24:part24 25:part25 26:part26 27:part2 29:part29  **Table 0.0 18 171: Variance 63 168: 50310 0.0	>US-08-927-93: (1-12) from US 94 1 EICADPSOKWV( PAM 150 Gap 15 131922 seqs, :	Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd MPsrch_pp protein - protein database search, using Smith-Waterman algorithm Fun on: Thu Apr 1 07:38:21 1999; MasPar time 2.83 Seconds Tabular output not generated. 68.511 Million cell updates/sec	
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774 775 776 777 778 779 880 881 882 883 884 885 886 887 990 990					
777777777777777777777777777777777777777	777777777777777777777777777777777777777	177777777777777777777777777777777777777	811 880 880 880 777 777	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
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R39917 R39972 R38938 R38941 R38941 R389977 R39977 R39936 R38936 R38937 R399127 R399118 R389118 R389110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R3899110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R389110 R3891	9096 9098 8954 8954 9096 9104 9102	9086 8944 9107 9131 9131 8931 8938 8938 9113 9113	8926 8940 8940 8942 8942 89114 8934	0564398 056580 056581 056581 056581 056581 056581 056581	3914 6663 6663 2675 2673 2673 2672 2671 2671 0191
8 Ala 8 Phe 8 Phe 8 Phe 8 Phe 8 Thr 8 Arsp 8 Arsp 8 Thr 8 Thr 8 Thr 8 Thr 8 Thr 8 Thr 8 Thr	@ L @ B P L B L L II L	8 Glu 8 Glu 8 Thr 8 Leu 8 Leu 8 Leu 8 Leu 8 Arsp 8 Arsp	otaxincy osinocy n48>Glu e28>Glu u55>Arg 5-69. 78 Thr1 78 Thr1 78 Thr1 945>Ser	, 2, 5, 4, 5, 7, 7, 7, 7, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Human monocyte chemoa MCF.  Chemoattractant prote Human monocyte chemo-prol3+ chemokine betal Bac 3 chemokine betal Bac 2 chemokine betal Drol1/2 chemokine betal Bac 1 chemokine betal Stem cell mobilising Human chemokine betal Stem cell mobilising Human chemokine beta
	.73e .73e .73e .73e .73e .73e .73e	.73e .73e .73e .73e .73e .73e .73e			2.57e-02 2.57e-02 2.57e-02 2.57e-02 6.85e-02 6.85e-02 6.85e-02 6.85e-02 6.85e-02 6.85e-02

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PPH PPH BROWN BROW
            PA (SHAK) SHARMA L R.

PA (VALS/) VAN ALSTYNE D.

PI Sharma LR, Van Alstyne D;

PI Sharma LS, Va
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Best Local S
Matches 1
                                                                                                                         W09504158-A.
09-FEB-1995.
26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-0CT-1993; US-136117.
            (UPJO ) UPJOHN CO.
Hoogwerf AJ, Ledbe
WPI; 95-082239/11.
N-PSDB; Q85371.
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93
94
95
96
97
98
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29-AUG-1995 (first entry)
Chemoattractant protein MCP-3.
MCP-3; chemoattractant; heparanase; heparin; heparan
arthritis; restenosis; cancer; wound healing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human monocyte chemoattractant factor hMCP-3; chemokine; vaccine; Human monocyte chemoattractant factor; hMCP-3; chemokine; vaccine; meningitis related homologous antigenic sequence; MRHAS; RV-1; immunoassay; diagnosis; treatment; prophylactic; bacterial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        R70801 standard; Protein;
                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R73915 standard;
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28-SEP-1994; CA0516.
28-SEP-1993; US-127499.
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WO9509232-A.
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1 EICADPSQKWVQ
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llarity 91.7%;
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Pred. No. 1.23e-02;
1; Mismatches 0
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Protein encoded by pA
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Monocyte chemoattractant protein analogue MCP-1 (10-76).
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03-JUN-1992.
29-NOV-1990; FR-014961.
(ERAP) ELF SANOFI.
(SNFI) SANOFI SA.
Caput D, Ferrara P, Miloux B
WPI; 92-185765/23.
ILT 4
W13598 standard; |
W13598;
07-NOV-1997 (fir
                                                                                                                                                                                                                                                Claim 1; Fig 2; 45pp; French.

This protein is encoded by the NC28 clone isolated from peripheral blood mononuclear cells stimulated with phorbol 2-myristate-3-acetate (see Q25259). The mature protein is claimed. It can be N-terminally deleted such that the mature protein starts at Val 3 or at Lys 19. The leader sequence is active in animal cells. See Q25258-Q25262.
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Purified heparanases, prepared under reducing conditions and Purified heparanases, prepared under reducing conditions and activated with transglutaminase, are given in R70786-801. Mos are prepared by reverse transcription of mRNA from activated leukoytes, then cloning of the CDNA into pVL1392 baculovirus
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Cytokine encoded by clone NC28.
Cytokine; plasmid pSE1; HTLV-1; human T-lymphocyte virus;
mouse; alpha-globin; E.coli cloning vector; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 vector, and expression in Sf9 cells in the presence
glutathione and dithiothreitol.
Sequence 99 AA;
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                                                                                                                                                                                Local Similarity nes 11; Conser
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ilarity 91.7%;
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/note= "putative"
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39..41
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Pred. No. 1.23e-02;
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PT anti-inflammatory agent
PS Disclosure; Page 5; 27pp; English.

CC The present sequence represents an analogue, MCP-1 (11-76), of monocyte
CC Chemoattractant protein-1 (MCP-1). The analogue, which lacks the
CC Chemoattractant protein-1 (MCP-1). The analogue, which lacks the
CC N-terminal amino acids 1-10 of MCP-1, acts as an antagonist of MCP-1
CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1
CC receptor. The analogue is useful as an anti-inflammatory agent to block
CC the effects of MCP-1 which is an inflammatory mediator causing migration
CC of monocytes and other cells e.g. basophils and lymphocytes into
CC inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
CC diseases. The analogue competes more effectively with MCP-1 for binding
CC MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably
                     RESULT
AC WILL
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PS Disclosure; Page 5; 27pp; English.

CC The present sequence represents an analogue, MCP-1 (10-76), of monocyte

CC Chemoattractant protein-1 (MCP-1). The analogue, which lacks the

CC N-terminal amino acids 1-9 of MCP-1, acts as an antagonist of MCP-1

CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1

CC receptor. The analogue is useful as an anti-inflammatory agent to block

CC the effects of MCP-1 which is an inflammatory mediator causing migration

CC of monocytes and other cells e.g. basephils and lymphocytes into

CC inflammation sites. MCP-1 has been implicated in allergic and chronic

CC inflammatory diseases e.g. arthritis, arteriosclerosis and several lung

CC diseases. The analogue competes more effectively with MCP-1 for binding

CC MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably

CC providing 50% inhibition of binding at a 25:1 ratio or less, compared

CC with 75:1 for prior art mutant 7ND.
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Best Local
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19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
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19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
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Pred. No. 2.57e-02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Printi-inflammatory agent
Claim 7; Page 5; 27pp; English.
CC The present sequence represents an analogue, MCP-1 (9-76), of monocyte
CC The present sequence represents an analogue, which lacks the
CC chemoattractant protein-1 (MCP-1). The analogue, which lacks the
CC N-terminal amino acids 1-8 of MCP-1, acts as an antagonist of MCP-1
CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1
CC receptor. The analogue is useful as an anti-inflammatory agent to block
CC the effects of MCP-1 which is an inflammatory mediator causing migration
CC of monocytes and other cells e.g. basophils and lymphocytes into
CC of monocytes and other cells e.g. basophils and lymphocytes into
CC of Inflammation sites. MCP-1 has been implicated in allergic and chronic
CC inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
CC diseases. The analogue competes more effectively with MCP-1 for binding
CC MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably
CC providing 50% inhibition of binding at a 25:1 ratio or less, compared
CC with 75:1 for prior art mutant 7ND.
Sequence 68 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
Matches 1
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Best Local
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                                                         Homo sapiens.
CA2152141-A.
20-DEC-1996.
19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
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Homo sapiens.
CA2152141-A.
                                                                                                                                                                                                                                           Monocyte chemoattractant protein analogue MCP-1 (8-76). Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                  W13596 standard; peptide; 69
W13596;
07-NOV-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Monocyte chemoattractant protein analogue MCP-1 (9-76);
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       with 75:1 for prior art mutant 7ND Sequence 67 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gong J, Lewis I; WPI; 97-165844/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-NOV-1997 (first entry)
                         (LEWI/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
                                                                                                                                                                                                                    lung disease.
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llarity 91.7%;
Conservative
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Pred. No. 2.57e-
0; Mismatches
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Pred. No. 2.57e-02;
0; Mismatches 1
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2.57e-02;
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97-165844/16.

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PT anti-inflammatory agent to MCP-1
PT Anti-inflammatory agent to MCP-1
PT Anti-inflammatory agent to block
PT activity and inhibits binding to a MCP-1
PT Anti-inflammatory agent to block
PT anti-inflammatory mediator causing migration
PT Anti-inflammatory agent to block
PT anti-inflammatory mediator causing migration
PT Anti-inflammatory agent to block
PT anti-inflammatory migration
PT Anti-inflammatory mediator causing migration
PT Anti-inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
PT Anti-inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
PT Anti-inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
PT Anti-inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
PT Anti-inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
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PT Anti-inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
PT Anti-inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
PT Anti-inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
PT Anti-inflammatory diseases e.g. arthritis, arterioscler
                                                                                                        Query Match
Best Local S
Matches 1
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  disulfide_bond 5..45
WO9513295-A1.
18-MAY-1995.
07-NOV-1994; U12874.
                                                                                                                                                                                                                                                                                                      Claim 4; Page 11; 22pp; English.

Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28 Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients undercoing coronary arters and collects.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - a capable of inhibiting the monocyte chemo-attractant activity endogenous MCP-1 and can be used to treat restenosis
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(DAND ) DANA FARBER CANCER INST INC.
ROllins B, Zhang YJ;
WPI; 95-215051/28.
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                                                                                                                                                                                                                                                                                   undergoing
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                                     43
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1 EICADPSQKWVQ 12
eicadpkqkwvq
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Similarity 91.7%;
11; Conservation
                                                                                                        Similarity
11; Conser
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69 AA;
                                                                                                           Conservative
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4..29
5..45
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                                                                                                                                     94.78;
                                                                                                                                                                                                                                                                                   artery angioplasty.
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                                                                                                    Score 89; D
Pred. No. 2.
0; Mismatc
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Pred. No. 2.
                                                                                                        Mismatches
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2.57e-02;
                                                                                                                                     DB 14;
2.57e-02;
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                                                                                                                                                                       Length 69;
                                                                                                        Indels
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Best Local Similarity 91.7%;
Matches 11; Conservative
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07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER II
ROLLINS B, Zhang YJ;
WPI; 95-215051/28.
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R87676;
21-FEB-1996
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Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala: and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Monocyte chemotactic protein 1.

Human; monocyte chemoattractant protein; antisense; inhibition; mononuclear cell; lymphocyte; macrophage; smooth muscle cell; vascular restenosis.
                                                                                                        05-NOV-1996.
22-OCT-1992; 965678.
22-OCT-1992; US-965678.
27-MAY-1994; US-250958.
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                                      (UNMI ) UNIV MICHIGAN.
Kunkel SL, Lyle LR,
                                                                                                                                                                                                                                                                  US5571713-A.
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   el SL, Lyle LR,
96-505405/50.
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11..36
12..52
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51
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2.57e-02;
2.57e-1;
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                                                                                                                                                                                                                                                       Pri Anti-sense monocyte chemotactic protein-1 oligo:nucleotide(s) and prophide(s) - is used for inhibiting, treating or imaging areas of prepride(s) - is used for inhibiting, treating or imaging areas of protein-lar restenosis

Pri vascular restenosis or potential restenosis

Disclosure; page 5; 42pp; English.

The sequences given in R53398-99 represent sense and antisense concepts chemotactic protein-1 (MCP-1) respectively. These colligonucleotides may be labelled with a radionuclide and use therapeutically for the treatment of vascular restenosis.

Radiolabelled antisense MCP-1 compounds may be constructed using high cenergy alpha or beta emitting isotopes rather than the gamma compounds inactivate MCP-1 or inhibit purposes. Antisense MCP-1 compounds inactivate MCP-1 or inhibit purposes. Antisense MCP-1 compounds inactivate MCP-1 or inhibit production of MCP-1 so that monocytes are not attracted to the area of vascular injury and CC proliferation of vascular cells is inhibited.
                                                                                                                                                                                     Query Match
Best Local S
Matches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 11; Consei
R87675 stand:
R87675;
R87675;
21-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Anti-sense Monocyte Chemotactic Protein-1 oligo:nucleotide(s) - useful for therapy or diagnosis of restenosis, etc. Disclosure; Column 13-14; 16pp; English.
This is the amino acid sequence of the human monocyte chemoattractant protein (MCP)-1, a member of the C-C chemokine family. MCP-1 is a potent stimulator of monocyte chemotaxis and is produced by injured vascular smooth cells thus attracting monocytes and macrophages which infiltrate the injured area and release growth factor. This causes proliferation of the vascular smooth cells resulting in restenosis. The gene sequence can be used to generate antisense sequences e.g. T48093-7, which can be used to inhibit in vitro MCP-1 prodn. by mononuclear cells e.g. lymphocytes or macrophages, or smooth muscle cells, esp. in order to prevent vascular restenosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antisense; RNA; DNA; monocyte chemotactic protein-1; MCP-1; radionuclide; vascular restenosis; alpha; beta; emitting isotope;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 K53398 standard; Protein; 76 AA.
R53398;
15-DEC-1994 (first entry)
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20-0CT-1993; U10074.
22-0CT-1993; US-965678.
(MICW ) MALLINCKRODT MEDICAL INC
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                                     standard;
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11; Conser
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ilarity 91.7%;
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                                     protein; 76 AA
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91.78;
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Pred. No. 2.57e-02;
0; Mismatches 1
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2.57e-02;
                                                                                                                                                                                                                      Length 76;
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Proceed to the monocyte chemo-attractant activity of endogenous monocyte chemoattractant activity of endogenous monocyte chemoattractant activity of endogenous chat they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations care: (1) substitution of 28 Tyr by aspartate; (2) substitution of 28 Tyr by aspartate; (2) substitution of amino arcids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 11; Conser
                                                                                                                                                                                                                                    25-FEB-1997.
05-OCT-1992; US-956863.
05-OCT-1992; US-956862.
05-OCT-1994; US-235659.
(MLCW ) MALLINCKRODT MEDICAL INC.
(UMMI ) UNIV MICHIGAN.
KUNKel SL, Lyle LR, Strieter RM;
WPI; 97-153541/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-JUN-1997 (first entry)
10-JUN-1997 (first entry)
Mature human monocyte chemoattractant protein-1 (MCP-1).
MCP-1; mature chemoattractant protein-1; cytokine; interleukin-8;
MCP-1; mature chemoattractant protein-1; maying; targeting;
IL-8; neutrophil activating peptide; labelling; imaging; targeting;
radionuclide; infection; inflammation; neoplasm; atheromatous lesion
Radio:labelling neutrophil-activating peptide(s) - for imaging targetted delivery of radioactive agent Example 10: Column 19-20; 15pp; English.
Will31 represents mature human monocyte chemoattractant protein-1 (MCP-1). MCP-1 was radionuclide labelled and used in a method for imaging a target site in vivo in an animal. Labelled MCP-1 was allowed to accumulate at a target site (having MCP-1 receptors) in the animal and detected so as to image the target site. Any Cys-Cys or Cys-Xaa-Cys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          W11131 standard; protein;
W11131;
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76 AA;
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3; US-152301.
TARBER CANCER INST INC.
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91.7%;
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d. No. 2.57e-02;
Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                                 Вp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fig. 1. The present sequence is a specifically claimed human MCP-1 of 28 Tyr by Leu and/or (4) deletion of 24 Arg by Phe; (3) substitution of 28 Tyr by Apa; and/or (4) deletion of and can be prevented by the monocyte chemoattractant protein of 20 yape 10; 22pp; English.

CC thaim 6; Page 11; 22pp; English.

CC thaim 6; Page 11; 22pp; English.

CC that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28 Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino caids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

CT he peptides can be used to prevent restenosis, e.g. in patients cundergoing coronary artery angioplasty.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER II
ROllins B, Zhang YJ;
WPI; 95-215051/28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ULT 14
R87677 standard; 1
R87677;
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                         modified_site
                                                     Key
                                                                         Human.
                                                                                                17-JAN-1990 (first entry)
Peptide from human glioma cell line U-105MG.
Glioma; leucocyte; chemotaxis; neoplasms.
                                                                                                                                                           P90292 standard; peptide; 76
P90292;
17-JAN-1990 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            disulfide_bond disulfide_bond
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Sequence 76 AA;
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No. 2.57e-02;
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31-JAN-1989; 030423.
31-JAN-1989; US-304234.
(USSH) US Dept. of Health a
Yoshimura T; Robinson E; Ap
WPI; 89-263501/36.
                                            12-NOV-1992.
27-APR-1992;
09-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wound treatment using monocyte chemotactic factor - has potent therapeutic effect on skin wounds and ulcers Disclosure; Page 12; 22pp; Japanese.
The invention relates to a new remedy for curing wounds which, instead of comprising a growth factor, comprises a monocyte chemotactic activating a growth factor, comprises a monocyte chemotactic activating factor (MCAF) or its variants or derivatives. The factor has potent effect on skin wounds and ulcers. The present sequence is human MCAF, the activity of which is exemplified as the new remedy.
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R87680;
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R28660;
24-MAR-1993 (first entry)
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Peptide is derive
leukocytes and ha
(DAIN ) DAINIPPON PHARM CO LTD Fukui T, Matsuo N, Yamada M, Y.
                                                                                                               RBS; promoter; tryptophan; Synthetic. W09219737-A.
                                                                                                                                                                                   Plasmid; monocyte chemotactic factor; MCF; translation; termination; terminator; initiation; ribosome binding s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
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13-SEP-1994; J01512.
13-SEP-1993; JP-2273
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Matsuo N, Yamada M, Yamagishi
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Matches 1
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Claim 1; Page 48 + Page 36; 56pp; English.
An expression plasmid, pHM483, for producing MCF(76) consisting of 76 amino acids was constructed. The prod. can be used for etreating bacterial infectious diseases.
Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for this cell type. MCP-1 is produced by injured vascular smooth muscle cells and attracts the monocytes and macrophages which infiltrate the area, releasing growth factors and resulting in proliferation of vascular smooth muscle and restenosis. Nucleic acid molecules which are antisense to the MCP-1 mRNA may be used to inhibit translation of MCP-1 and so may be useful for inhibiting vascular restenosis, partic. following balloon angioplasty or a related process. The molecule may be radiolabelled to increase its therapeutic effect or for imaging areas of potential
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mature MCP-1.
Antisense; monocyte chemotactic protein-1; MCP-1;
"C-C" family; chemoattractant cytokine; chemokine;
monocyte; chemotaxis; vascular smooth muscle cell;
proliferation; restenosis; balloon angioplasty.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 5; 50pp; English.

This sequence represents the mature form of monocyte chemotactic protein-1 (MCP-1). MCP-1 is a member of the "C-C" family of chemoattractant cytokines or chemokines. It is a potent stimulator of monocyte chemotaxis and has an extemely high degree of specificity for the chemotaxis and has an extemely high degree of specificity for the chemotaxis and has an extensely high degree of specificity for the chemotaxis and has an extensely high degree of specificity for the chemotaxis and has an extensely high degree of specificity for the chemotaxis and has an extensely high degree of specificity for the chemotaxis and has an extensely high degree of specificity for the chemotactic forms of the chemotactic fo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New anti:sense oligo:nucleotide(s) and peptide(s) for inhibiting restenosis - are directed against C-C family cytokine(s) such a monocyte chemotactic protein, opt. radio:labelled for therapy or
                                                        R73914 standard; protein;
R73914;
05-DEC-1995 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-JUL-1995.
13-JAN-1995; U00605.
14-JAN-1994; US-182917.
(MLCW ) MALLINCKRODT MEDICAL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
WO9519167-A1.
Human monocyte chemoattractant factor hMCP-1. Human monocyte chemoattractant factor; hMCP-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         restenosis.
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WPI; 95-263703/34.
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                                                                                                                                                                                                                                                    51 eicadpkqkwvq
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Similarity 91.7%;
11; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                             77 AA;
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                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                protein; 99 AA.
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                                                                                                                                                                                                                                                                                                                                                         94.78;
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Pred.
0; M
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Pred. No. 2.57e-02;
0; Mismatches 1
                                                                                                                                                                                                                                                                                                                             re 89; DB 15; ]
d. No. 2.57e-02;
Mismatches 1
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     chemokine; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                  Length 77;
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macrophage;
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                                                   Query Match
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Best Local
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Claim 47; Fig 8/10; 98pp; English.

R73914 is the chemokine Human monocyte chemoattractant factor hMCP-1

It contains the meningitis related antigenic sequences (MRHAS) claim

in R73895 and R73907, which are recognised by a monoclonal antibody

from the hybridoma Rubella virus (RV)-1. The claimed MRHAS peptides

may be used in immunoassays to diagnose the presence of bacterial

and/or viral meningitis agents in a sample, or in prophylactic and

therapeutic meningitis treatments. The peptides may also be used as

vaccines against meningitis.

NB: Identified by matching corresponding MRHAS peptides.

Sequence 99 AA;
                                                                                                                                                  Disclosure; Page 43-44; 56pp; English.
An expression plasmid, pHMC076 for producing MCF(76) consion of 76 amino acids was constructed. DNA encoding MCF(76) prepd. using a recombinant plasmid pHMCF7.
Sequence 99 AA;
                                                                                                                                                                                                                                                                                                                                                                              12-NOV 1992.
27-APR-1992; J00550.
09-MAY-1991; JP-135950.
(DAIN ) DAIMIPPON PHARM CO LTD.
FUKUI T, Matsuo N, Yamada M, Yamagishi J;
WPI; 92-398864/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New peptide(s) and corresp. antibodies for the treatment of meningitis - the peptide(s) corresp. to homologous antigenic sites on bacterial and viral agents and on chemokine(s), used
                                                                                                                                                                                                                                                                                 N-PSDB; Q30748.

Prodn. of polypeptide(s) having monocyte chemotactic activity using expression plasmids with E. coli elements and specific E. coli strains
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(VALS/) VAN ALSTYNE D.
Sharma LR, Van Alstyne
WPI; 95-147431/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9509232-A.
06-APR-1995.
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28-SEP-1993; US-127499.
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immunoassay; diagnosis; treatment; prophylactic; bacterial;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R28663;
24-MAR-1993
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73 eicadpkqkwvq 84
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                                                                           Similarity
                                                94.7%;
llarity 91.7%;
Conservative
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24..99
/label= mat_protein
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                                                Score 89; DB 5; 1
Pred. No. 2.57e-02
0; Mismatches
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Pred.
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No. 2.57e-02;
                                                                                                 Length 99;
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Best Local
                      Human derived monocyte chemo-attractant peptide prods. - obtd. from human glioma cell line U-105MG or peripheral blood mononuclear leukocytes. Disclosure; fig 2; 66pp; English.

This is a human-derived monoyte chemo-attractant peptide (MCP-1) sequence MCP-1 exhibits optimal chemotactic activity at a concn. of lnM and has a mol. mass of c.a. 8,400 D. MCP-1 can be used for treating infection eg inflammatory disease, or for the control of monocytes at the site of the infection. The corresp. DNA is obtd. by chemical synthesis, by screening reverse trascripts of mRNA from purified blood leukocytes or cell cultures of eg U-373 MG or KMG-5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LT 22
P95387 standard; protein;
P95387;
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chemical synthesis, by sci
purified blood leukocytes
Sequence 99 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-JUL-1989; ...
30-MAR-1989; 330446.
30-MAR-1989; US-330446.
(USSH) US Dept. Health and Human.
YOShimura T. Robinson EA, Appella
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Hoogwerf AJ, Ledbo
WPI; 95-082239/11.
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26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chemoattractant protein MCP-1.
MCP-1; chemoattractant; heparanase; heparin; heparan sulfate; arthritis; restenosis; cancer; wound healing.
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W09504158-A.
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Human monocyte chemo-attractant peptide; inflammatory disease; neoplasms
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|||||| |||||
1 EICADPSQKWVQ 12
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nes 11; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Appella E, Leonard EJ;
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Pred. No. 2.57e-02;
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Query Match

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sthma and fibrosis

Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Drol3+ variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10 Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and be used to infectious diseases, allergies, prostaglandin dependent fever and be used to infectious diseases, allergies, prostaglandin dependent fever and be used to infectious diseases, allergies, prostaglandin dependent fever and be used to infectious diseases, allergies, prostaglandin dependent fever and be used to infectious diseases, allergies, prostaglandin dependent fever and be used to infectious diseases inflammation and atherosclerosis. Ck beta10 cDNA can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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Best Local
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Matches 11; Conservative
                                                                          19-MAR-1998 (first entry)

19-MAR-1998 (first entry)

Bac 3 chemokine beta10 or monocyte chemotactic protein 4 variant. Human; chemokine beta10; Ck beta10; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4;
                                                                                                                                                                                                                                                                                                                                                           W22673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Drol3+ chemokine beta10 c
Human; chemokine beta10;
solid tumour; infection;
                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 be used to isolate genes encoding similar peptides, in gene and for chromosome identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Polypeptide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (HUMA-) HUMAN GENOME SCI INC.
Adams M, Alderson R, Applebaum E,
Parmelee D, White J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-FEB-1996; U02598.
23-FEB-1996; WO-U02598
   Homo sapiens.
WO9731098-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     45 eicadpkekwvg
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                                                                                                                                                                                                                                                                                                                                                               standard; Protein; 75 AA.
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llarity 83.3%;
Conservative
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Pred. No. 6.85e-02;
1; Mismatches 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 71;
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Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Bac 3 variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atheroscierosis. Ck beta10 cDNA can
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Best Local
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Example 11, Fig 5; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Bac 2 variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10 Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate antibodies. Labelled Ck beta10 can be used to screen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-MAR 1998 (first entry)

Bac 2 chemokine beta10 or monocyte chemotactic protein 4 variant.

Human; chemokine beta10; Ck beta10; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4;
                                                                                                                                                                                                                                                                                                                                              Polypeptide encoding chemokine protein 4 - useful to treat tun asthma and fibrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                        (HUMA-) HUMAN GENOME SCI INC.
Adams M. Alderson R. Applebaum E, Li H,
Parmelee D. White J;
WPI: 97-435153/40.
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23-FEB-1996; U02598.
23-FEB-1996; WO-U02598.
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WO9731098-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W22672 standard; Protein; 77 AA.
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23-FEB-1996; U02598.
23-FEB-1996; WO-U02598.
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                                                                                                                                                                                                                                                                                                                                                                           ine beta 4
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. No. 6.85e-02;
Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                     monocyte chemotactic immune disease, infection,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       disease, infection,
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Example 11; Fig 5; 83pp; English.

Che present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Droll/2 variant, which can chemotactic protein 5 (Ck beta10 can be used to treat leukaemia, solid tumours, chronic or compounts wound healing, regulates haematopoiesis and generates cantibodies. Labelled Ck beta10 can be used to identify its cognate compounds for (ant)agonist activity. The antagonist can be used to creat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and compounds for (ant)agonist activity. The antagonist can be used to creat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and compounds for (ant)agonist activity. Service infectious diseases, allergies, prostaglandin dependent fever and compounds for can compound compound compounds for can compound compounds for can compound compound compounds for can compound compounds for can compound compound compounds for can compound compound compounds for can compound co
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Best Local Similarity
Matches 10; Consei
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Best Local
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                                                                                                                                                                                              syndrome, lung inflammation and atherosclerosis. Ck beta10 cDNA can be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Droll/2 chemokine beta10 or monocyte chemotactic protein 4 variant. Human; chemokine beta10; Ck beta10; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          be used to isolate genes encoding similar peptides, and for chromosome identification.

Sequence 77 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Adams M, Alderson R, Parmelee D, White J; WPI; 97-435153/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Polypeptide encoding chemokine beta 4 and protein 4 - useful to treat tumours, auto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-MAR-1998 (first entry)
Droll/2 chemokine beta10 o
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W22674;
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                                            53 eicadpkekwvq
1 EICADPSQKWVQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R, Applebaum E, Li H, Li Y, Lima
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                                                                                                                     90.48;
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                                                                                           Score 85; DB 27;
Pred. No. 6.85e-02;
1; Mismatches 1
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Pred. No. 6.85e-02;
1; Mismatches 1
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autoimmune disease, infec
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                                                                                                                                               Length
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LT 27
W22671 standard; Protein;
W22671;

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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stem cell mobilising chemokine CKbeta-10.

Haematopoietic cell; parasitic infection; colony stimulating factor; haematoregulator; immune response; bacterial infection; transplant; wound healing; bone marrow; immunosuppression; regeneration;
Ten new chemokine(s) able to mobilise stem ce increased levels of haematopoietic cells are increase resistance to infection Claim 7; Page 11-12; 24pp; English.
The present sequence represents a chemokine, of mobilising stem cells. The chemokine can I improve stem cell mobilisation, optionally to
                                                                                                                                                                                                                                                                  (SMIK ) SMITHKLINE BEECHAM CORP.
Kreider BL, Li H, Pelus L, White JR,
WPI; 97-258956/23.
                                                                                                                                                                                                                                                                                                                                                                                    01-MAY-1997.
23-OCT-1996; U16959.
24-OCT-1995; US-006051.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         wound healing; bone marrow; immunosuppression; regeneration; neoplastic disease; viral disease; gene therapy; cytotoxic drug. Synthetic.
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23-FEB-1996; U02598.
23-FEB-1996; WO-U02598.
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Pred. No. 6.85e-02;
1; Mismatches 1
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are required,
e, CKbeta-10, which is capable n be used therapeutically to together with a colony
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29-FEB-1996.
23-AUG-1994; WO-U09484.
23-AUG-1994; WO-U09484.
08-SEP-1994; ZA-006936.
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R93087 standa
R93087;
27-AUG-1996
                                                                                                                                                                                                                                                                                     to treat, e.g. leukaemia, solid tumours and auto-immune diseases Claim 19; Fig 2; S3pp; English.

A novel human chemokine, Ck beta-10 (R93087), was identified as the product of a cDNA clone (T17050) isolated from a 9-wk early human tissue cDNA library. The protein is structurally related to the chemokine family. Recombinant Ck beta-10 can be obtd. by incorporating the cDNA into a vector and expression of the protein in e.g. E. coli, COS or Sf9 cells. Ck beta-10 can be used to tree solid tumours, chronic infections, psoriasis, asthma and allergy, to regulate haematopoiesis, promote wound healing, and to inhibit angiongenesis. It can also be used to inhibit bone marrow stem cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   stimulating factor or other haematoregulatory agent. It can be used wherever an increased level of haematopoietic cells is needed, e.g. to increase the immune response to chronic infection (particularly bacterial or parasitic), to promote wound healing, in (transplant) patients with reduced bone marrow function as a result of immunosuppressive treatment or disease, and to provide more rapid regeneration of bone marrow after treatment for neoplastic or viral diseases. The induced stem cells may be harvested for subsequent return to the patient, optionally after they have been genetically manipulated to deliver a selected gene product (gene therapy). The cells may be sequence 82 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New chemokine Ck(beta)-4 and -10 genes and polypeptide(s) -
to treat, e.g. leukaemia, solid tumours and auto-immune disc
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1; Mismatches 1
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RESULT
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DT 21

IT 30
W30191 standard; Protein; 98
W30191;
21-MAY-1998 (first entry)

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Job time: 21 secs.
                                                                                                                                                                                                      PI tumours

Claim 1; Page 36-37; 47pp; English.

CC laim 1; Page 36-37; 47pp; English.

CC This polypeptide comprises human macrophage-derived

CC monocyte chemotactic protein-5 (MCP-5), a novel C-C chemokine.

CC Its amino acid sequence was deduced from a cDNA clone (see

CT90880 and T90883) isolated from a human macrophage cDNA

CC Library. A claimed method for producing MCP-5 comprises

CC culturing a host cell that is stably transformed or transfected

CC with MCP-5 polynucleotide. Also claimed is a hybridoma that

CC reactive with the mature MCP-5. MCP-5 (or its analogues and

CC fragments) is used to enhance the immune response in cases of

CC useful as anti-inflammatories in cases of e.g. arthritis and

CC crohn's disease, also for treatment of atherosclerosis,

CC angiogenesis and tumour growth (or metastasis). The MCP-5

CC inhibitors can possibly also be used to reduce the damaging effects

CC inhibit replication of HIV. MCP-5 can also be used to identify

CC its cognate receptor, while MCP-5 can also be used to identify

CC its cognate receptor, while MCP-5 peptides (or the analogues or

CC MCP-5 agonists and antagonists.

So Sequence 98 AA;
                                                                                                                                       Query Match
Best Local S
Matches 1
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02-0CT 1997; U04898.
26-MAR-1996; US-622851.
(ICOS-) ICOS CORP.
Godiska R, Gray PW;
WPI; 97-489645/45.
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Monocyte chemotactic protein 5; MCP-5; human; macrophage;
Chemokine; inhibitor; antlinflammatory; atherosclerosis;
Crohn's disease; arthritis; angiogenesis; tumour; metastasis;
therapy; diagnosis; medical imaging.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB; T90880.

Polynuclectide encoding monocyte chemotactic protein-5 - useful in treatment of e.g. inflammation, atherosclerosis, angiogenesis and
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Pred. No. 6.85e-02;
1; Mismatches 1;
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76 80.9 95 2 JN0841 interleukin-8 - dog 4. 76 80.9 96 2 JC2478 eotaxin - rat 4. 76 80.9 96 2 I48099 eotaxin precursor - g 4. 76 80.9 101 2 S42496 interleukin-8 - sheep 4. 76 80.9 101 2 I46997 interleukin-8 precurs 4. 76 80.9 103 2 A53096 interleukin-8 precurs 4. 76 80.9 103 2 A44253 alveolar macrophage c 4. 77 79.8 92 2 I52322 macrophage inflammato 7. 78 79.7 91 1 A46539 monocyte chemoattract 1.	97.9 109 2 A54678 monocyte chemotactic 1. 95.7 120 2 148147 monocyte chemoattract 4. 94.7 99 2 A60299 monocyte chemoattract 7. 93.6 99 2 JC2136 monocyte chemoattract 1. 91.5 99 2 JC2417 monocyte chemoattract 3. 89.4 99 2 A39296 monocyte chemoattract 9. 89.4 99 2 JC2336 monocyte chemoattract 9. 81.9 92 2 JC4912 eotaxin - human 1. 81.9 97 2 JC4912 eotaxin - human 3. 81.9 92 A30574 macrophage inflammato 3. 81.9 92 A30574 macrophage inflammato 3. 81.9 93 2 B35673 LD78-beta protein pre 3.	Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.  SUMMARIES  Result  Query  Query  Ouery  Ouery  Ouery  Description  Pred. No.	Statistics: Mean 24.451; Variance 36.011; scale 0.679	Database: pir58 1:pir1 2:pir2 3:pir3 4:pir4	essing: M	37463440	Title: >US-08-927-939-11 Description: (1-12) from US08927939.pep Perfect Score: 94 Sequence: 1 EICADPSQKWVQ 12	Run on: Thu Apr 1 07:37:45 1999; MasPar time 3.31 Seconds Tabular output not generated.  135.966 Million cell updates/sec	Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd MPsrch_pp protein - protein database search, using Smith-Waterman algorithm	
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_	92	97.9	109	2	A54678	monocyte chemotactic	1.73e-07	
2	90	95.7	120	N	148147		4.80e-07	
ω	89	94.7	99	ผ	A60299			
4	88	93.6	99	N	JC2136		1.32e-06	
ر. ت	86	91.5	99	N	JC2417			
σ	84	89.4	99	N	A39296			
7	84	89.4	99	N	JC2336			
8	83	88.3	125	N	I46857			
9	78	٠	97	ν	JC4912	eotaxin - human	1.87e-04	
10	77		50	N	C60407	monocyte adherence-in	3.04e-04	
11	77		92	_	A31767	macrophage inflammato	3.04e-04	
12	77	٠	92	N	A30574	macrophage inflammato	3.04e-04	
13	77		93	N	B35673	LD78-beta protein pre	3.04e-04	
14	76		95	N	JN0841	interleukin-8 - dog	4.91e-04	
15	76	٠	96	N	JC2478	eotaxin - rat	4.91e-04	
16	76	80.9	96	2	I48099	eotaxin precursor - g	4.91e-04	
17	76		101	2	S42496	hee	4.91e-04	
18	76	80.9	101	N	146997		4.91e-04	
19	76		103	N	A53096	interleukin-8 precurs	4.91e-04	
20	76		103	Ν	A44253			
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##cross-references GDB:138473; OMIM:158106
Pp_position 1/q11-1/q12
                                                                                                                                                                                                                                                                                                                                                                                                                           ##residues 1-109 ##label MIN
##cross-references EMBL:X71087; NID:g288396; PID:g288397
This protein induces proteinase secretion and chemotaxis
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##cross-references GB:X72309
ENCE TOTATO
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 EICADPSQKWVQ 12
                                    EICADPTQKWVQ 94
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                                                                                                                                                                                                                                                                                                                                                                                                              macrophages and monocytes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minty, A.; Chalon, P.; Guillemot, J.C.; Kaghad, M.; Liauzun, P.; Magazin, M.; Miloux, B.; Minty, C.; Ramond, P.; Vita, N.; Lupker, J.; Shire, D.; Ferrara, P.; Caput, D. submitted to the EMBL Data Library, March 1993
Molecular cloning of MCP-3: a human monocyte-derived monocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Biochem. Biophys. Res. Commun. (1993) 191:535-542
Human monocyte chemotactic protein-3 (MCP-3): Molecular
cloning of the cDNA and comparison with other chemokines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Opdenakker, G.; Fiten, P.; Nys, G.; Froyen, G.; Van Roy, N.; Speleman, F.; Laureys, G.; Van Damme, J. Genomics (1994) 21:403-408
The human MCP-3 gene (SCVA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome 17q11.2-q12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             monocyte chemotactic protein 3 precursor monocyte chemoattractant protein MCP-3 #formal_name Homo sapiens #common_name man 28-Oct-1994 #sequence_revision 28-Oct-1994 24-Sep-1998
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cytokine; glycoprotein; inflammation
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                                                                       Score 92; DB 2;
Pred. No. 1.73e-07
1; Mismatches
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#journal Biochem. Biophys. Res. Commun. (1990) 169:346-351
#title Structure of human nonocyte chemotactic protein gene and
#title regulation by TPA.
#cross-references_MUID:90290466
                                                                                                                  #authors
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#accession I48147
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##residues 1-99 ##label ROL
##cross-references GB:M30816; GB
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#+residues 1-120 ##label RES
##cross-references GB:L04985; NID:g349820; PID:g349821
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Similarity 83.3%;
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monocyte chemoattractant protein 1 precursor - human
GDCF-1; glioma-derived monocyte chemotactic factor 1; MCAF;
MCP-1; monocyte chemotactic factor 1; monocyte secretory
protein; tumor-derived chemotactic factor 2
glioma-derived chemotactic factor 2
formal_name Homo saptens #common_name man
20-Feb-1993 #sequence_revision 20-Feb-1993 #text_change
M.I.; Leonard, E.J.

FEBS Lett. (1989) 244.487-493

Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse
                                                                                                                                                                                                                                                                                                     Rollins, B.J.; Stier, P.; Ernst, T.; Wong, G.G. Mol. Cell. Biol. (1989) 9:4687-4695
The human homolog of the JE gene encodes a mono
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-mar-1998
A35474; A33476; S03339; I51841; A60299; A32300; A32396;
A34561; I57488; JC1096
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#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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Pred. No. 4.80e-07
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#title
                                                                                                                                                                                                                                                                                                                                       Damme, J.

#journal Biochem. Biophys. Res. Commun. (1990) 167:904-909

#title Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel N-terminally processed form.

#cross-references_MUID:90211336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #authors Furutani, Y.; Nomura, H.; Notake, M.; Oyamada, Y.; Fukul, Yamada, M.; Larsen, C.G.; Oppenheim, J.J.; Matsushima, #journal Biochem. Blophys. Res. Commun. (1989) 159:249-255 Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF).

#cross-references MUID:89165862
                                                                    #authors Li, Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhi:
J.F.; Kolattukudy, P.E.
#journal Mol. Cell. Biochem. (1993) 126:61-68
#title The expression of monocyte chemotactic protein (MCP-1) in
human vascular endothelium in vitro and in vivo.
#cross-references MUID:94150478
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#accession S03339
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#residues 1-99 ##label FUR

##cross-references GB:M24545; NID:g187434; PID:g307163
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#residues 1-99 ##label YO2

##cross-references GB:S71513; NID:g240867; PID:g240868
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##cross-references GB:X14768; NID:g34513; PID:g34514
##experimental_source glioma cell line U-105MG
NCE I51841
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##residues 'X',25-99 ##label ROB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-l/monocyte chemotactic activating factor (MCP-l/MCAF).
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Adv. Exp. Med. Biol. (1991) 305:47-56
Human monocyte chemoattractant protein-1 (MCP-1).
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                     translated from GB/EMBL/DDBJ
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##residues 24-28,'Q',30-99 ##label YEQ
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Biochem. Biophys. Res. Commun. (1994) 199:962-968
Porchine luteal cells express monocyte chemoattractant protein-1 (MCP-1): Analysis by polymerase chain reaction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     monocyte chemoattractant protein-1 precursor - pig
#formal_name Sus scrofa domestica #common_name domestic
30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change
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Chinese J. Microbiol. Immunol. (1994) 14:29-32
The PCR, cloning and sequencing of human monocyte
Chemoattractant protein-1 (MCP-1) gene.
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##residues 1-99 ##label HOS
##experimental_source corpus luteum
#FECATION #Superfamily macrophage inflammatory protein
                                                                                                             ##molecule_type protein
##residues 50-68,'X',70-74,'X',76 ##label WE2
##experimental_source seminal vesicle
##control #superfamily macrophage inflammatory protein
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##cross-references GB:M84602; GB:M85264; NID:g163394; PID:g163395
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Similarity 83.3%;
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10; Conservative
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                                                                                                   glycoprotein
                                                                                                                                                                                                                                                                          Gene expression and cDNA cloning identified a major basic protein constituent of bovine seminal plasma as bovine monocyte-chemoattractant protein-1 (MCP-1).
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#formal_name Sus scrofa domestica #common_name domestic
24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change
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Scheit, K.H.
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Analysis by cDNA
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No. 3.63e-06;
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#introns
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#title
                                                                                                                                                                                                                                        #authors Yoshimura, T.; Yuhki, N.

J. Immunol. (1991) 146:3483-3488

#title Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and expression in spleen cells.

#cross-references_MUID:91225489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #accession JC233
##molecule_type
                                                                                                                                                                                                                             #accession
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                                                                                                                           ##residues 1-125 ##label YOS
##cross-references GB.M57440; NII::g165469; PID::g165470
##CICATION #superfamily meacrophage inflammatory protein
RY #length 125 #molecular-weight 13776 #checksum
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                                                                                                                                                                                          ##molecule_type mRNA
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ICADPSQKWVQ
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                                                           88.3%;
llarity 90.9%;
Conservative
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Biochem. Biophys. Res. Commun. (1994) 202:1272-1279
Characterization of the bovine monocyte chemoattractant
                                                                                                                                                                                                                                                                                                                                                                                                                      #type complete monocyte chemoattractant; #formal_name Oryctolagus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MCP-1
26/1; 65/2
#superfamily macrophage inflammatory
#length 99 #molecular-weight 11114
                                                                                                                                                                                                                            I46857
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monocyte chemoattractant protein-1 - bovine
#formal_name Bos primigenius indicus #common_name zebu cattle
20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
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12
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1-99 ##label WEM
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Pred. No. 9.85e-06;
1; Mismatches 1
                                                                          Score 83; DB 2; L
Pred. No. 1.62e-05;
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Pred. No. 9.85e-06;
1; Mismatches 1
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                                                            Mismatches
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cuniculus
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Rest Local Similarity 66.7%;
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Best Local
                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                          #authors Sporn S.A.; Elerman, D.F.; Johnson, C.E.; Morris, J.;

Martin, G.; Ladner, M.; Haskill, S.

#journal J. Immunol. (1990) 144:4434-4441

#title Monocyte adherence results in selective induction of novel genes sharing homology with mediators of inflammation and tissue repair.

#cross-references MUID:90257367

#accession C60407
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#title
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                                                                                                                                                                                                                                                                                                     ##molecule_type mRNA
##residues 1-50 ##label SPO
FICATION #superfamily macrophage inflammatory protein
# tength 50 #checksum 9927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ##experimental_source dermal fibroblast
This protein has eosinophil specific chemotatic activity.
FICATION #superfamily macrophage inflammatory protein
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Local Similarity 66.7%;
                                                                                                                                             1 EICADPSQKWVQ 12
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A31767 #type complete
macrophage inflammatory protein 1-beta precursor - human
cytokine HC21; G-26 protein; H400 homolog; lymphocyte
activation gene l protein (LAG-1); MIP-lbeta; pAT744; SCYA2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bartels, J.; Schlueter, C.; Richter, E.; Noso, N.; Kulke, R. Christophers, E.; Schroeder, J.M.
Biochem. Blophys. Res. Commun. (1996) 225:1045-1051
Human dermal fibroblasts express eotaxin: Molecular cloning, mRNA expression, and identification of eotaxin sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #formal_name Homo sapiens #common_name man 06-Nov-1992 #sequence_revision 06-Nov-1992
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#product eotaxin #status predicted #label MAT
#length 97 #molecular-weight 10790 #checksum 448
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                                                                                                                                                                                                                      Score 77; DB 2; 1
Pred. No. 3.04e-04;
3; Mismatches :
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No. 1.87e-04;
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REFERENCE A40978
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                              #journal #title
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Fauthors Chang, H.C.; Reinherz, E.L.

#Journal Eur. J. Immunol. (1989) 19:1045-1051

#Journal Isolation and characterization of a cDNA encoding a putative cytokine which is induced by stimulation via the CD2

**Extracture on human T lymphocytes.**

#cross-references MUID:89325421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #journal #title
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Seuanez, H.N.; Leonard, W.J.
#journal J. Biol. Chem. (1991) 266:17531-17536
#title The gene encoding the Mote 2 cytokine. Genomic structure,
#TIV-J/tax responsiveness of 5' upstream sequences, and
chromosomal localization.
#cross-references MUID:91373378
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#title
                                                                                                                                                                                                                             #journal J. Immunol. (1989) 142:1582-1590
#title Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of secreted factors.

#cross-references_MID:89140347
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                                                                                                                               ##residues 1-19,'L',21-92 ##label ZIP
##cross-references GB:M25316; NID:g602454;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    #residues 1-92 ##label CHA
##cross-references GB:Xl6166; NID:g32035; PID:g32036
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##residues 1-92 ##label LIP
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##cross-references GB:M69201; NID:g178021
##note 15-Ala was also found
                                                                                                                                                                                ##molecule_type mRNA
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##residues 1-1
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##residues 1-9
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        A45817
Miller, M.D.; Hata, S.; Malefyt, R.D.W.; Krangel, M.S.
J. Immunol. (1989) 143:2907-2916
A novel polypeptide secreted by activated human T
                                                                                                                                                                                                                                                                                                                                                                                             A30574
Zipfel, P.F.; Balke, J.; Irving, S.G.; Kelly, K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Leonard, W.J.

Proc. Natl. Acad. Sci. U.S.A. (1988) 85:9704-9708

Identification, cloning, and characterization of an
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07-Jun-1990 #sequence_revision 29-May-1998 #text_change
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activation protein 2 (Act-2); T-cell activation protein
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#title
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#accession A35673
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#accession D30552
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#residues 1-39, 'REASS', 46-92 ##label BRO
##cross-references GB:M23502; NID:g533212; PID:g533213
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                                                                                         ##residues
                                                                                                          ##molecule_type DNA
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##residues 7-55
                                                               ##cross-references GB:D90144; NID:g219905; PID:d1014875; PID:g219906
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Local Similarity 66.7%;
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This protein is secreted by activated lymphocytes and monocytes.
is bound by chemokine (C-C) receptor 5 (see PIR:A43113) and receptor 1 (see PIR:A45177).
A30574
Zipfel,
U.
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macrophage inflammatory protein 1-alpha precursor - human
LD78-alpha protein precursor; lymphocyte tumor
promoter-induced protein; macrophage inflammatory protein
homolog GOS19-1; MIP-lalpha; pAT464; small inducible
cytokine A3; T-cell activation protein
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A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.
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#product macrophage inflammatory protein 1-beta #status
experimental #label MAT\
#disulfide_bonds #status experimental
#length 92 #molecular-weight 10212 #checksum 7597
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chemotaxis; cytokine; inflammation
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26/1; 64/2
                                                                                                                                                                                                      Structures of human genes coding for cytokine LD78
                                                                                                                                                                                                                                 Nakao, M.; Nomiyama, H.; Shimada, K. Mol. Cell. Biol. (1990) 10:3646-3658
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                                                                                       1-92 ##label NAK
                   P.F.; Balke,
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Pred. No. 3.04e-04;
                   J.; Irving,
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                S.G.; Kelly,
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#map_position 17q11-17q21
CLASSIFICATION #superfamily macrophage inflamma
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  #authors
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#journal J. Biochem. (1986) 99:885-894
#title A cDNA clone used to study mRNA inducible in human tonsillar
#toross-references MUID:86223879
#cross-references MUID:86223879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              #authors Blum, S.; Forsdyke, R.E.; Forsdyke, D.R.
#journal DNA Cell Biol. (1990) 9:589-602
#title Three human homologs of a murine gene encoding an inhibitor
#cross-references MUID:91103879
#cross-references MUID:91103879
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#title Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of secreted factors.

#cross-references MUID:89140347
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                                                                            ##residues 1-93 ##label NAK ##cross-references GB:D90145; NID:g219907; PID:d1014876;
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##residues 1-92 ##label OBA
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##residues 1-92 ##label ZIP
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NCE A30412
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Similarity 66.7%;
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LD78-beta protein precursor - human
macrophage inflammatory protein homolog
inducible cytokine A4
                   Blum, S.; Forsdyke, R.E.; Forsdyke, DNA Cell Biol. (1990) 9:589-602
                                                                                                                                                                                                                      Nakao, M.; Nomiyama, H.; Shimada, K. Mol. Cell. Biol. (1990) 10:3646-3658 Structures of human genes coding for
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#disulfide_bonds #status predicted
#length 92 #molecular-weight 10085 #ci
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Three human homologs of a murine gene encoding an inhibitor
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                                                                                                                                                                                                          expression.
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Pred. No. 3.04e-04;
3; Mismatches 1
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Best Local Similarity 66.7%;
Matches 8; Conservative
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#cross-references MUID:90287702
#accession S10157
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#map_position 17q11-17q21
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#accession B30412
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This protein is a polymorphonuclear leukocyles chemotactic and is involved in the host defense function.
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This protein is a member of a "small inducible" or "activation specific" gene family, is likely to be an early-acting interleukin, and is the product of a putative GO/G1 switch gene.
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Local Similarity 66.7%;
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                                     EVCLDPKEKWVQ 86
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#superfamily beta-thromboglobulin
#length 95 #molecular-weight 10611 #checksum
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Nucleic Acids Res. (1990) 18:3261-3270
Two inflammatory mediator cytokine genes are closely linked
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Cloning of a canine gene homologous
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#product LD78-beta protein #status predicted #label MAT
#length 93 #molecular-weight 10161 #checksum 7784
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interleukin-8 - dog
#formal_name Canis lupus familiaris #common_name dog
19_May-1994 #sequence_revision 19-May-1994 #text_change
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Pred. No. 4.91e-04
2; Mismatches
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Best Local Similarity 81.8%;
Matches 9; Conservative
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Best Local Similarity 81.8%;
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#title
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#title Constitutive and allergen-induced
in the guinea pig lung.
#cross-references MUID:95173589
#accession 148099
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##residues 1-96 ##label JOS
##rooss-references EMBL:X77603; NID:9602551; PID:9602552
##TO This protein is identified as a potent eosinophil chemoattractant.
IFICATION #superfamily macrophage inflammatory protein
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##residues 1-96 ##label RES
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Biochem. Blophys. Res. Commun. (1994) 205:788-794
Ectaxin: Cloning of an eosinophil chemoattractant cytokine and increased mRNA expression in allergen-challenged
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#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
09-May-1997
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21-Feb-1995 #sequence_revision
08-Sep-1997
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Pred. No. 4.91e-04;
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#journal Immunol. Cell Biol. (1994) 72:398-405
#title Cloning, sequencing, expression and inflammatory activity
#cross-references_MUID:95137691
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(FICATION #superfamily beta-thromboglobulin

#length 101 #molecular-weight 11292 #checksum
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Similarity 66.7%;
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submitted to the EMBL Data Library, March 1994
Nucleotide sequence of ovine interleukin 8 cDN/
polymerase chain reaction.
                                                                                                A53096 #type complete
interleukin-8 precursor - pig
#formal_name Sus scrofa domestica #common_name domestic
02-Jun-1995 #sequence_revision 02-Jun-1995 #text_change
08-Sep-1997
Lin, G.; Pearson, A.E.; Scamurra, R.W.; Zhou, Y.; Baarsch, M.J.; Weiss, D.J.; Murtaugh, M.P.
J. Biol. Chem. (1994) 269:77-85
Regulation of interleukin-8 expression in porcine alveolar macrophages by bacterial lipopolysaccharide.
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#superfamily beta-thromboglobulin
#length 101 #molecular-weight 11:
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#common_name domestic sheep
06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
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#formal_name Ovis sp. #common_name sheep
21-Feb-1997 #sequence_revision 21-Feb-1997
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#accession S07723
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                                                      ##molecule_type DNA
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##residues 1-103 ##label GOO
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    Yoshimura,
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                                            1-148 ##label TIM
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  T.; Takeya, M.; Takahashi,
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##cross-references GB:M86923; NID:g164520; PID:g164521
IFICATION #superfamily beta-thromboglobulin
RY #length 103 #molecular-weight 11633 #chec
##cross-references EMBL:X17053; NID:g55530; PID:g55531
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                                                                                                                                                      Timmers, H.T.M.; Pronk, G.J.; Bos, J.L.; van der Eb, A.:
Nucleic Acids Res. (1990) 18:23-34
Analysis of the rat JE gene promoter identifies an AP-1
binding site essential for basal expression but not fo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kuijper, J.L.; Forstrom, J.W.; Martin, T.R.
Biochemistry (1992) 31:10483-10490
Molecular cloning of porcine alveolar macrophage-derived
neutrophil chemotactic factors I and II; identification of
porcine IL-8 and another intercrine-alpha protein.
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#length 103 #molecular-weight 11677
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#formal_name Sus scrofa domestica #common_name domestic pig
30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change
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Pred. No. 4.91e-04;
2; Mismatches 2
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Pred. No. 4.91e-04
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Best Local Similarity 66.7%;
Matches 8; Conservative
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#journal
                                      #authors
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#cross-references MUID:95298037
#accession 152322
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##molecule_type mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                               ##residues 1-92 ##label RES
##cross references EMBL:U22414; NID:g790632; PID:g790633
##cross references EMBL:U22414; NID:g790632; PID:g790633
#superfamily macrophage inflammatory protein
#superfamily macrophage inflammatory protein
#superfamily macrophage inflammatory protein
#superfamily macrophage inflammatory protein
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##cross-references GB:M57441; NID:g205333; PID:g205334
##experimental_source spleen cells
the authors translated the codon GAA for
##note Lys and GCT for residue 63 as Leu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ##molecule_type mRNA
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Similarity 75.0%;
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                                                                                                                                                   A46539 #type complete
monocyte chemoattractant cytokine RANTES precursor -
MuRantes
<u>.</u>
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Molecular cloning of rat monocyte chemoattractant protein-l
(MCP-1) and its expression in rat spleen cells and tumor
                                                                                            #formal_name Mus musculus #common_name house mouse 18-Jun-1993 #sequence_revision 16-Aug-1996 #text_change 11-Sep-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shi, M.M.; Godleski, J.J.; Paulauskis, J.D.
Biochem. Biophys. Res. Commun. (1995) 211:289-295
Molecular cloning and posttranscriptional regulation of macrophage inflammatory protein-1 alpha in alveolar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  macrophage inflammatory protein-lalpha - rat
#formal_name Rattus norvegicus #common_name Norway rat
29-May-1998 #sequence_revision 29-May-1998 #text_change
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                                  Danoff, T.M.; Lalley, P.A.; Chang,
                                                                         I48875; A46539; I48654; I56970
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                Neilson, E.G
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Immunol. (1994) 152:1182-1189
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#product immediate-early serum-responsive protein JE
#status predicted #label MAT
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Pred. No. 7.91e-04;
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Pred. No. 4.91e-04;
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DATE ORGANISM TITLE

14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change
09-May-1997

immune activation gene 2 - rabbit
#formal_name Oryctolagus cuniculus

#common_name

#type complete

rabbit

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KEYWORDS
FEATURE
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RESULT
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#journal
#title
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #authors Neilson, E.G.; Krensky, A.
#journal Kidney Int. (1992) 41:220-225
#title Isolation and characterization of cDNA from renal tubular epithelium encoding murine Rantes: A small intercrine from the Scy superfamily.
#cross-references MID:92277990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                #authors Shin, H.S.; Drysdale, B.E.; Shin, M.L.; Noble, S.N.; Paznekas, W.A.

#journal Mol. Cell. Biol. (1994) 14:2914-2925

#title Sinitton of a lipopolysaccharide responsive (5'-flanking regions of MuRantes and crg-2.

#cross-references_MUID:94217689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #title Cloning, genomic organization, and chromosomal localization of the Scya5 gene encoding the murine chemokine RANTES.
#cross-references MUID:94132613
#accession I48875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #cross-references MUID:92289805
#accession A46539
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##residues 1-18,'A',20-91 ##label SCH
##experimental_source macrophage cell line PU5-1.8
##note sequence extracted from NCBI backbone (NCBIN:106768,
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ###cross-references GB:M77747; NID:g200649; PID:g200650
##tross-references GB:M77747; NID:g200649; PID:g200650
This chemoattractant for monocytes but not neutrophils
immediate-early response protein to LPS stimulation.
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##residues 1-91 ##label SHI
##cross-references EMBL:X70675; NID:g475205; PID:g475206
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##cross-references EMBL:U02298;
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Local Similarity 58.3%;
                                                                                                                                71 QVCANPEKKWVQ 82
                                                                                      1 EICADPSQKWVQ 12
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#product monocyte chemoattractant cytokine RANTES
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Pred. No. 1.27e-03;
3; Mismatches 2
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Best Local Similarity 58.3%;
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#accession 146730
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##cross-references GB:Y10802; NID:g1924937; PID:e294088; PID:g1924938
##cross-references GB:Y10802; NID
##experimental_source bone marrow
This protein belongs to the beta-chemokine family which is one of
the major HIV-suppressive factors. It plays roles in autoimmune
processes such as multiple sclerosis and rheumatoid arthritis and
in tumor biology, and contribute to the trafficking and
recuitment of the responsive cells.
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W #length 92 #molecular-weight 10066 #check
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Local Similarity 58.3%;
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interleukin-8 - rabbit
neutrophil attractant/activation protein-1
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P.; Van Aelst, I.; Van Damme, J.; Opdenakker, G.
Biochem. Biophys. Res. Commun. (1997) 231:726-730
Human monocyte chemotactic protein-2: cDNA cloning and
regulated expression of mRNA in mesenchymal cells.
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#superfamily macrophage inflammatory protein
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##residues 1-148 ##label
##cross-references GB:J04467;
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##residues 1-148 ##label ROL
##cross-references GB:M19681; NID:g193486; PID:g387168; GB:M19682
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J. Biol. Chem. (1989) 264:679-682
Platelet-derived growth factor-inducible gene JE is a member of a family of small inducible genes related to platelet
                                                                                                                                                                                                                                                                                                                                                                                 Rollins, B.J.; Morrison, E.D.; Stiles, C.D.
Proc. Natl. Acad. Sci. U.S.A. (1988) 85:3738-3742
Cloning and expression of JE, a gene inducible by
platelet-derived growth factor and whose product has
cytokine-like properties.
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Biochem. J. (1990) 271:797-801
A novel neutrophil chemoattractant generated during an inflammatory reaction in the rabbit peritoneal cavity vivo. Purification, partial amino acid sequence and structural relationship to interleukin 8.
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146871; S13052
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cytokine; glycoprotein
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PDGF-inducible JE glycoprotein precursor - mouse
#formal_name Mus musculus #common_name house mouse
01-Dec-1989 #sequence_revision 01-Dec-1989 #text_change
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J. Immunol. (1911) 148:3483-3488
Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and expression in spleen cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                     #journal
#title
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          126
                    24-91
                                                                                                                                                        #gene
                                                                                                                                                                                                                                                                                #cross-references MUID:88285659
#accession A28815
                                                                                                                                                                                                                                                                                                                                                                                        #authors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #accession
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #journal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #authors
                                                                                                                                                                            ##residues
##cross references GB:M21121
The acronym RANTES reflects the description "Regulated NT The acronym RANTES reflects the description "Regulated".
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ##molecule_type mRNA
##residues 1-120 ##label YOU
##residues #length 120 #molecula
                                                                                                                      ##molecule_type mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   74 EVCTNPNDDWVQ 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              73 EVCADPKKEWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 EICADPSQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 EICADPSQKWVQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   h 76.6%;
Similarity 66.7%;
                                                                                                                                                                                                                                                                                                                              Schall, T.J.; Jongstra, J.; Dyer, B.J.; Jorgensen, Clayberger, C.; Davis, M.M.; Krensky, A.M.
J. Immunol. (1988) 141:1018-1025
A human T cell-specific molecule is a member of a
                                                                                                                                                                                                                                                                                                                                                                                                                       A2881
                                                                                                                                                                                                                                                                                                                                                                                                                                                    A28815 #type complete
monocyte chemoattractant cytokine RANTES precursor - human
small inducible cytokine A5; T-cell specific cytokine RANTES
#formal_name Homo sapiens #common_name man
30-Jun-1989 #sequence_revision 16-Aug-1996 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            myelosuppressive activity. JE0177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Youn, B.S.; Zhang, S.; Broxmeryer, H.E.; Antol, K.; Frases Jr., M.J.; Hangoc, G.; Kwon, B.S.
Biochem. Biophys. Res. Commun. (1998) 247:217-222
Isolation and characterization of LMC, a novel lymphocyte monocyte chemoattractant human CC chemokine, with
                                                                              #superfamily macrophage inflammatory protein chemotaxis; cytokine; immediate-early protein; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    74.5%;
llarity 50.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   lymphocyte and monocyte chemoattractant CC chemokine - human #formal_name Homo sapiens #common_name man 10-Jul-1998 #sequence_revision 10-Jul-1998 #text_change
                                                                                                                                                          GDB:SCYA5; D17S136E
                                                                                                                                                                                                                                                                                                                                                                                                         A28815
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#domain signal sequence #status predicted #label
#product T-cell protein RANTES #status predicted
MAT
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n 148 #molecular-weight 16326
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 72;
Pred. No.
1; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 70; DB 2; L
Pred. No. 8.28e-03;
5; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   No. 3.26e-03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 120;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #checksum
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                  SIG\
#label
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                                            REFERENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSIONS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #title sequence of the murine haemopoietic stem cell #cross-references MUID:91016858
#accession $11685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
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#authors
#journal
                                                                                                                                                                                                                                                                                                                                                                                                          #journal J. Exp. Med. (1988) 167:1939-1944
#title Cloning and characterization of a cDNA for murine macrophage
inflammatory protein (MIP), a novel monokine with
inflammatory and chemokinetic properties.
#cross-references MUID:88258380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              #authors Kwon, B.S.; Weissman, S.M.
#journal Proc. Natl. Acad. Sci. U.S.A. (1989) 86:1963-1967
#title cDNA sequence of two inducible T-cell genes.
#cross-references MUID:89184547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #accession
                                                                                                                         #accession
                                                                                                                                          #contents
                                                                                                                                                               #journal
                                                                                                                                                                                                                             #authors
                                                                                                                                                                                                                                                                                                                                                                                             #accession
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #authors
                                                   ##molecule_type mRNA
#residues 1-92 ##label DAV
##cross-references EMBL:X12531; NID:g53122; PID:g53123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ##molecule_type mRNA.

##residues 1-92 ##label KWO

##cross-references GB:J04491; NID:g201524; PID:g201525
                                                                                                                                                                                                                                                                   ##note
                                                                                                                                                                                                                                                                                                                               ##cross-references EMBL:X12531
                                                                                                                                                                                                                                                                                                                                                ##molecule_type mRNA
##residues 1-48,'E',50-90,'I',92 ##label
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ##cross-references EMBL:X53372; NID:g54062; PID:g297531
##note the authors' translation of the nucleotide sequence
differs at several positions from the sequence gi-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ##residues
                                                                                                                                                                                                                                                                                                            ##note
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                                                                                                                                                                                                                         A53885
Davatelis,
                                                                                                                     J. Exp. Med. (1989) 170:2189
erratum
A53885
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macrophage inflammatory protein-1-alpha precursor - mouse
heparin-binding chemotaxis protein; L2G25B protein;
SCI_MIP-la; SIS alpha; stem cell inhibitor/macrophage
Brown, K.D.; Zurawski, S.M.; Mosmann,
J. Immunol. (1989) 142:679-687
                                        A30552
                                                                                                                                                                                                                                                                                                                                                                                             S04533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Davatelis, G.; Tekamp-Olson, P.; Wolpe, S.D.; Herms Luedke, C.; Gallegos, C.; Coit, D.; Merryweather,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S04533
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #length 91
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                                                                                                                                                                                Luedke, C.; Gallegos, C.;
Cerami, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cerami,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inflammatory protein 1-alpha; T-cell activation protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1-92 ##label GRO
                                                                                                                                                                                                                                                                                the authors translated the codon GAG
Asp and ATT for residue 91 as Asn
                                                                                                                                                                                                                                                                 the sequence has
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            72.3%;
                                                                                                                                                                                                    G.; Tekamp-Olson, P.; Wolpe, S.D.; Hermse
C.; Gallegos, C.; Coit, D.; Merryweather,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #molecular-weight 9990 #checksum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 68; DB 1; Len
Pred. No. 2.08e-02;
' wismatches 2;
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                                                                                                                                                                                                                                                                 corrected
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                                                                                                                                                                                                                                                                   in reference A53885
                   T.R.;
                                                                                                                                                                                                                                                                                                            for residue 49
                       Zurawski,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hermsen,
ather, J.;
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COMMENT
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##residues 1-21,'L',23-61,'A',63-92 ##label BRO

##cross-references GB:M23447; NID:g533240; PID:g533241

REFERENCE JL0088
                                                                                                                                                                                                                                   FEATURE
1-23
                                         В
                                                                                                                                                                                                                                                                          CLASSIFICATION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ##note
REFERENCE
                                                                                                                                                                      SUMMARY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                              Query Match 72.3%;
Best Local Similarity 58.3%;
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                     *Journal J. Immunol. (1991) 146:4031-4040

#title Genomic structure of murine macrophage inflammatory protein-1-alpha and conservation of potential regulatory sequences with a human homolog, LD78.

#cross-references MUID:91237116

#accession 156104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ##residues 24-33,'XX',36-54 ##label SHE
#authors Wolpe, S.D.; Davatelis, G.; Sherry, B.; Beutler, B.; Hesse,
D.G.; Nguyen, H.T.; Moldawer, L.L.; Nathan, C.F.; Lowry,
S.F.; Cerami, A.
#journal J. Exp. Med. (1988) 167:570-581
#title Macrophages secrete a novel heparin-binding protein with
#title inflammatory and neutrophil chemokinetic properties.
#cross-references MUID:88154745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #accession PSU3U3
##molecule_type mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    #journal J. Exp. Med. (1988) 168:2251-2259
#title Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta.
#cross-references MUID:89067830
#accession PS0303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          #authors
                                                                                                                                                                                                                                                                                                                    #introns
                                                                                                                                                                                                                                                                                                                                                     ##molecule_type protein
##residues 24-33,'XX',36-42 ##label WOL
##note _____26-Met, 30-pro, and 39-Thr were also found
                                         71 QICADSKETWVQ 82
1 EICADPSQKWVQ 12
                                                                                                                                                                 #domain signal sequence #status predicted #label SIG\
#product macrophage inflammatory protein #status
experimental #label MAT
#length 92 #molecular-weight 10345 #checksum 5009
                                                                                                                                                                                                                                                                                            23/3; 26/1; 63/2 superfamily macrophage inflammatory protein
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Davatelis, G.; Wolpe, S.D.; Masiarz, F.; Coit, D.; Cerami,
                                                                                                                                                                                                                                                                        heparin binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      156104
                                                                                                  Score 68; DB 2; 1
Pred. No. 2.08e-02;
                                                                                Mismatches
                                                                                                                      Length 92;
                                                                                2; Indels
                                                                              0;
                                                                              Gaps
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Search completed: Thu Apr Job time : 18 secs.

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1 92 97.9 99 1 MCP3_HUMAN MONOCYTE CHEMOTACTIC P 2.52e-08 3 89 94.7 99 1 MCP1_CANPA MONOCYTE CHEMOTACTIC P 4.46e-08 4 89 94.7 101 1 MCP1_CANPA MONOCYTE CHEMOTACTIC P 4.46e-08 5 88 93.6 99 1 MCP1_PIG 6 86 91.5 99 1 MCP2_BIG 7 86 91.5 99 1 MCP2_BOYIN MONOCYTE CHEMOTACTIC P 2.44e-07 8 85 90.4 98 1 MCP4_HUMAN MONOCYTE CHEMOTACTIC P 2.44e-07 9 84 89.4 99 1 MCP4_BOYIN MONOCYTE CHEMOTACTIC P 2.44e-07 10 83 88.3 125 1 MCP4_HUMAN MONOCYTE CHEMOTACTIC P 2.44e-07 11 82 87.2 97 1 EOTA_MOUSE EOTAXIN PRECURSOR (EOS 2.28e-06 12 87.2 97 1 EOTA_HUMAN MONOCYTE CHEMOTACTIC P 1.31e-06 13 81 86.2 97 1 EOTA_HUMAN MONOCYTE CHEMOTACTIC P 1.31e-06 14 81 86.2 97 1 EOTA_HUMAN MONOCYTE CHEMOTACTIC P 1.31e-06 15 78 83.0 104 1 MCP5_MOUSE EOTAXIN PRECURSOR (EOS 2.28e-06 16 77 81.9 92 1 MIJA_HUMAN MONOCYTE CHEMOTACTIC P 2.44e-05 17 77 81.9 92 1 MIJA_HUMAN MONOCYTE CHEMOTACTIC P 3.96e-06 18 83.0 104 1 MCP5_MOUSE EOTAXIN PRECURSOR (EOS 3.96e-06 19 76 80.9 92 1 MIJA_HUMAN MACROPHAGE INFLAMMATOR 3.51e-05 20 76 80.9 101 1 IL8_SHEEP INTERLEUKIN 8 PRECURSO 6.01e-05 21 76 80.9 103 1 IL8_PIG INTERLEUKIN 8 PRECURSO 6.01e-05 23 76 80.9 103 1 IL8_PIG INTERLEUKIN 8 PRECURSO 6.01e-05 24 76 80.9 103 1 IL8_PIG INTERLEUKIN 8 PRECURSO 6.01e-05 25 76 80.9 103 1 IL8_PIG INTERLEUKIN 8 PRECURSO 6.01e-05 26 76 80.9 103 1 IL8_PIG INTERLEUKIN 8 PRECURSO 6.01e-05 27 76 80.9 103 1 IL8_PIG INTERLEUKIN 8 PRECURSO 6.01e-05 28 76 80.9 103 1 IL8_PIG INTERLEUKIN 8 PRECURSO 6.01e-05	Pred. No. 1s the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.  SUMMARIES  Result Query No. Score Match Length DB ID Description Pred. No.	1:swissprot Mean 25.218; Variance:	Post-processing: Minimum Match 0% Listing first 100 summaries Database: swiss-prot36	Scoring table: PAM 150 Gap 15 Searched: 74019 segs, 26840295 residues	Title: >US-08-927-939-11 Description: (1-12) from US08927939.pep Perfect Score: 94 Sequence: 1 EICADPSOKWYQ 12	Thu Apr 1 07:36:21 1999; MasPar ti 139.878 MasPar ti	Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd MPsrch_pp protein - protein database search, using Smith-Waterman algorithm	
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TRANSLATION INITIATION ORNITHINE DECARBOXYLAS GENOME POLYPROTEIN (CO TBX6 PROTEIN (T-BOX PR SPINDLE POLE BODY ASSO MYELOID UPREGULATED PR HYPOTHETICAL 44.3 KD PR HYPOTHETICAL 44.3 KD PR HYPOTHETICAL A4.3 KD PR HYPOTHETICAL A4.3 KD PR HYPOTHETICAL A4.3 KD PR FRANSLATION INITIATION PUTANIVE BETA-GALACTOSIAES PRE PROTEIN-TYROSINE PHOSP MAJOR VAULT PROTEIN (M HYPOTHETICAL 115 KD PR CAPSID ASSEMBLY PROTEIN K ANTHER-SPECIFIC PROTEIN K ANTHER-SPECIFIC PROTEIN G HYPOTHETICAL BOTTEIN G HYPOTHETICAL 66.0 KD P GLYCOGEN PHOSPHORYLASE ENVELOPE POLYPROTEIN G	THYMUS AND ACTIVATION- THYMUS AND ACTIVATION- PERIPLASMIC NITRATE RE BETA-GALACTOSIDASE PRE PLASMA-CELL MEMBRANE G LEUROCYTE ANTIGEN CD37 DELTA-AMINOLEVULINIC A HYPOTHETICAL PROTEIN H TENNISLATTON INITIATION	HYPOTHETICAL 41.7 KD P INVERTASE 4 PRECURSOR INVERTASE 2 PRECURSOR BETA-GALACTOSIDASE PRE	BETA-GALACTOSIDASE PRE LYMPHOTACTIN PRECURSOR PUTATIVE POLYNUCLEOTID TRANSCRIPTIONAL REPRES HYPOTHETICAL 13.2 KD P	INTERLEUKIN-8 PRECURSO INTERLEUKIN-8 PRECURSO INTERLEUKIN-8 PRECURSO MACROPHAGE INFLAMMATOR MACROPHAGE INFLAMMATOR	INTERLEUKIN-8 PRECURSO INTERLEUKIN-8 PRECURSO LYMPHOTACTIN PRECURSOR EMBRYO FIBROBLAST PROT MACROPHAGE INFLAMMATOR			INFLAMMATOR C-1 PRECURS CC-3 PRECURS EMOTACTIC P INFLAMMATOR INFLAMMATOR INFLAMMATOR INFLAMMATOR INFORMATIC P HEMOTACTIC P HEMOTACTIC P HEMOTACTIC P HEMOTACTIC P HEMOTACTIC P
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DESCRIPTION OF COLUMN AND THE STATE OF COLUMN AND THE 
                                                        EMBL; X72308; G313708; ALT_INIT.
EMBL; X72309; -; NOT_ANNOTATED_CDS.
EMBL; X71087; G288399; -
EMBL; X71087; G288399; ALT_INIT.
EMBL; X71087; G288397; ALT_INIT.
EMBL; X71087; G288397; ALT_INIT.
PIR; J21478; J21478.
PIR; S32222; S32222; S32222
PIR; S32222; S32222
PIR; S32222; S32222
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01-DEC-1995 (REL. 32, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 36, LAST ANNOTATION UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (MCP-3) (MONOCYTE CHEMOATTRACTANT PROTEIN 3) (NC28).
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                                                                                                                                                                                                                                                                                       MEDLINE; 97263733.

MEUNIER S., BERNASSAU J.-M., GUILLEMOT J.-C., FERRARA P., DARBON H.;

BIOCHEMISTRY 36.4412-4422(1997).

-i. FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND EOSINOPHILS, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. ALSO INDUCES THE RELEASE OF GELATINASE B. THIS PROTEIN CAN BIND HEPARIN.

-i. SUBUNIT: MONOMER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.

MEDILINE; 93305913.

MINTY A., CHALON P., GUILLEMOT J.C.,

MAGAZIN M., MILOUX B., MINTY C., RAW.

SHIRE D., FERRARA P., CAPUT D.;

EUR. CYTOKINE NETW. 4:99-110(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRUCTURE BY NMR, AND SUBUNIT.
MEDLINE; 97053697.
KIM K.-S., RAJARATHNAM K., CLARK-LEWIS
FEBS LETT. 395:277-282(1996).
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LAUREYS G., VAN DAMME J.;
GENOMICS 21:403-408(1994).
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA;
EUTHERIA; PRIMATES.
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SIMILARITY: BELONGS TO THE INTERCRINE
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                       1NCV; 15-OCT-97
158106; -.
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PS00472;
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  SMALL_CYTOKINES_CC; 1.
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PTPJ_MOUSE
SUIS_HUMAN
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PLASMA-CELL MEMBRANE G
PROTEIN-TYROSINE PHOSP
SUCRASE-ISOMALTASE, IN
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VITA N., LUPKER J.,
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Best Local S
Matches 1
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-I- FUNCTION: CHEMOTACTIC FACTOR THAT AT NEUTROPHILS.

-I- SUBUNIT: MONOMER OR HOMODIMER; IN EQ.

-I- SIMILARITY: BELONGS TO THE INTERCRIN C-C) (CHEMOKINE CC).

EMBL; L04985; G349821; -.
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INFLAMMATORY
SIGNAL
CHAIN
MOD_RES
DISULFID
DISULFID
DISULFID
DISULFID
MCP1_HUMAN STANDARD; PRT; 99 AA.
p13500;
p13500;
01-JAN-1990 (REL. 13, CREATED)
01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOTACTIC AND ACTIVATING FACTOR) (MCAF) (MONOCYTE SECRETORY PROTEIN JE)
                                                                                                                                                                                                                                                                                                                                                   DISULFID
DISULFID
CARBOHYD
SEQUENCE
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Q08782;
Q1-NOV-1995 (REL. 32, CREATED)
Q1-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
Q1-NOV-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1)
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CONFLICT
SEQUENCE
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YOSHIMURA T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SCYAZ OR MCP1.
CAVIA PORCELLUS (GUINEA PIG).
EUKARYOTA; METAZOA; CHORDATA;
EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHEMOATTRACTANT PROTEIN-1).
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| EICADPSQKWVQ 12
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11; Conser
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10; Conser
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91.7%;
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2; 1
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PYRROLIDONE CARBOXYLIC
BY SIMILARITY.
BY SIMILARITY.
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BY SIMILARITY.
BY SIMILARITY.
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1. No. 2.52e-08;
Mismatches 0
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7.99e-09;
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(SMALL CYTOKINE
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MEDLINE; YUV,
ROLLINS B.J., STIE
ROLLINS B.J., STIE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. MEDLINE; 90290466. SHYY Y.J., LI Y.S., BIOCHEM. BIOPHYS. RE
                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE: 91207938.
CHANG H.C., HSU F., FREEMAN G.J.,
TNT. IMMUNOL. 1:388-399(1989).
                                                                                                                            3D-STRUCTURE MODELLING.
MEDLINE; 91312872.
GRONENBORN A.M., CLORE G.M.;
PROTEIN ENG. 4:263-269(1991).
                                                                                                                                                                                                                      MEDLINE: 89184525.

ROBINSON E.A., YOSHIMURA T., LEONARD E.J., TANAKA SHABANOWITZ J., HUNT D.F., APPELLA E.; PROC. NATL. ACAD. SCI. U.S.A. 86:1850-1854(1989).
                                                                                      MEDLINE; 97143315
LUBKOWSKI J., BUJ
                                                                                                                                                                                     SEQUENCE OF 29-53 AND EMEDLINE; 90211336.
DECOCK B., CONINGS R.,
                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE; 92095166.
EFFECT OF DELETION OF MEDLINE; 96195223.
                            MEDLINE; 96234959
HANDEL T.M., DOMA
BIOCHEMISTRY 35:6
                                                          STRUCTURE BY NMR
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MEDLINE; 89184525
                                                                                                                                                                                                                                                                                                   YOSHIMURA T., LEONARD
                                                                                                                                                                                                                                                                                                                                   MOL. CELL. BIOCHEM.
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LEONARD E.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BIOCHEM. BIOPHYS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. MEDLINE; 89165862.
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EUTHERIA; PRIMATES.
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HOMO SAPIENS
                                                                                                         K-RAY CRYSTALLOGRAPHY (1.85 ANGSTROMS).
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                                                                             STRUCT.
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                           DOMAILLE P.J.;
35:6569-6584(1996).
                                                                            BIOL. 4:64-69(1997).
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DL. 9:4687-4695(1989)
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                                                                                                                                                                                                                                                                                        ) E.J.;
305:47-56(1991).
         N-TERMINAL RESIDUES
                                                                                                                                                                                                            82-92
                                                                                                                                                                             LENAERTS J.-P., BILIAU A., VAN DAMME COMMUN. 167:904-909(1990).
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COMMUN. 159:249-255(1989).
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169:346-351(1990).
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                                                                                     HANDEL T.M., WLODAWER A.;
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FEBS LETT. 395:277-282(1996)
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ZHANG Y.J., RUTLED
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73 EICADPKQKWVQ 84
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PTM: MONOMER OR HOMODIMER; IN EQUILIBRIUM.

CELL SELECTIVITY. DELETION OF THE AMINO- TERMINAL RESIDUE CONVERTS

IT FROM AN ACTIVATOR OF BASOPHIL TO AN EOSINOPHIL CHEMOATTRACTANT.

SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATHEROSCLEROSIS.
SUBJURIT: MONOMER OR HOMODIMER;
FIM: PROCESSING AT THE N-TERMII
CELL SELECTIVITY. DELETION OF 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FUNCTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BUT NOT NEUTROPHILS OR EOSINOPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. HAS BEEN IMPLICATED IN THE PARHOGENESIS OF DISEASES CHARACTERIZED BY MONOCYTIC INFILTRATES, LIKE PSORIASIS, RHEUMATOI ARTHRITIS OR ATHEROSCLEROSIS. MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF
                                 Similarity
11; Conser
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CHEM. 269:15918-15924(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                          CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           UGUCCIONI M., BAGGIOLINI M., CLARK-LEWIS I., DAHINDEN C.A.;
ED. 183:681-685(1996).
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                             94.7%;
larity 91.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                        SMALL_CYTOKINES_CC;
                                                                                                11025
                                                                                                                                                   SIGNAL;
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PYRROLIDONE CARBOXYLIC ACID.
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INFLAMMATORY RESPONSE; 3D-STRUCTURE.
                                                                                                  5355B695
                             re 89; DB 1; L
1. No. 4.46e-08;
Mismatches 1
                                                                                                            SING: LOSS OF ACTIVITY.

SING: LOSS OF ACTIVITY.

SING: 90% REDUCTION IN ACTIVITY.

A: 90% REDUCTION IN ACTIVITY.

A: 90% REDUCTION IN ACTIVITY.

A: 50% REDUCTION IN ACTIVITY.

C: 95% REDUCTION IN ACTIVITY.

D: 105% OF ACTIVITY.

L: LOSS OF ACTIVITY.

L: 105% REDUCTION IN ACTIVITY.
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                                                                                              REDUCTION IN ACTIVITY CRC32;
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P52203;
01-OCT-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ROSSEN R.D., SMITH C.W., ENTHAN M.L.;

CIRCULATION 95:693-700(1997)

-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS. IMPORTANT FACTOR IN THE COURSE OF THE INFLAMMATORY REACTION TO REPERFUSION OF THE PREVIOUSLY ISCHEMIC MYCCARDIUM.

MAY PLAY A SIGNIFICANT ROLE IN MONOCYTE TRAFFICKING INTO THE REPERFUSED MYCCARDIUM.

-!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).

-!- INDUCTION: BY TNF-ALPHA.

-!- TISSUE SPECIFICITY: ENDOTHELIUM OF SMALL VEINS AND INTRAFASCICULAR VEINS, AND INFILITRATING LEUKOCYTES.
                                                                                                                                                                                                                                                                                                                                                   DISULFID DISULFID
                                                                                                                   MCP1_PIG STANDARD; PRT; 99 AA. P42831; 01-NOV-1995 (REL. 32, CREATED) 01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE) MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1). SCYA2.
                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE;
                                                                                            SUS SCROFA EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-UUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
                     SEQUENCE FROM N.A.
MEDLINE; 94183284.
HOSANG K., KNOKE I., KI
                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KUMAR A.G., BALLANTYNE C.M., MICHAEL L.H., LINDSEY M.L., HAWKINS H.K., BIRDSALL H.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE=JUGULAR VEIN ENDOTHELIAL; MEDLINE; 97176620.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHEMOATTRACTANT PROTEIN-1).
SEQUENCE FROM N.A.
                                                                                 EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                      MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                          CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUTHERIA; CARNIVORA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CANIS FAMILIARIS (DOG)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCYA2 OR MCP1
                                                                                                                                                                                                                                                       73 EICADPKQKWVQ 84
                                                                                                                                                                                                                                          1 EICADPSQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                   -C) (CHEMOKINE CC).
U29653; G1144186; -.
TE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                 ARTIODACTYLA.
                                                                                                                                                                                                                                                                                                                                                                                                                        CHEMOTAXIS; SIGNAL;
                                                                                            (PIG).
METAZOA;
                                                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                   35
4
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24
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                                                                                                                                                                                                                                                                                                                                                                                     23
101
24
                                                                                                                                                                                                                                                                                                   94.7%;
91.7%;
                                                                                           CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                       11121 MW;
                                                                                                                                                                                                                                                                                                                                                   59
75
                     KLAUDINY J., WEMPE F., WUTTKE W., S. COMMUN. 199:962-968(1994).
                                                                                                                                                                                                                                                                                      Score 89; DB 1; 1
Pred. No. 4.46e-08;
0; Mismatches 1
                                                                                                                                                                                                                                                                                                                                     BY SIMILARITY.
BY SIMILARITY.
A7075B14 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                  ; INFLAMMATORY RESPONSE.
BY SIMILARITY.
MONOCYTE CHEMOTACTIC PR
PYRROLIDONE CARBOXYLIC
                                                                                                                                                                                                                                                                                                                                                                           SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                           VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                            TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MACKAY C.R., LAROSA G.J.,
                                                                                                                                                                                                                                                                                                             Length 101;
                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                 PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                      ACID
                                                                                            MAMMALIA;
                                 SCHEIT
                                                                                                                                                                                                                                                                                                                                                                                     N 1.
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                                К.н.;
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Best Local S
Matches 1
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Best Local
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DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID DISULFID
                                                                                                                                                                                                                                                                                                                                                                     MCP2_PIG STANDARD; PRT; 99 AA.
P49873;
01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
                                                                                                                                                   CYTOKINE;
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL;
                                                                                                                               MOD_RES
                                                                                                                                                                                      EMBL;
                                                                                                                                                                                               -!- SIMILARITY: BELONGS
C-C) (CHEMOKINE CC)
                                                                                                                                                                                                                     -!- SUBUNIT: MONOMER OR
                                                                                                                                                                                                                             BIOCHEM. BIOPHYS. RES. COMMUN. 205:148-153(1994).
-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MO
CAN BIND HEPARIN.
                                                                                                                                                                                                                                                              HOSANG K.K., KNOKE I.I., KLAUDINY J.J., WEMPE F.F., SCHEIT K.K.;
                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE; 95091716.
                                                                                                                                                                                                                                                                                                                   EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                                                                                                                              SUS SCROFA (PIG).
EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                   SCYA8 OR MCP
                                                                                                                                                                                                                                                                                                                                                             CHEMOATTRACTANT PROTEIN 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -!- SUBUNIT: MONOMER OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE-BRAIN;
ZACH O.R.F.;
                                                                                                                                           CHAIN
                                                                                                                                                                           PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  / Match 93.6%;
Local Similarity 83.3%;
nes 10; Conservative
                    73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73 EICAEPKQKWVQ
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c
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EICADPSQKWVQ
                   EVCADPQQKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EICADPSQKWVQ 12
                                                                                                                                                                        248480; G683719; -. re; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Z48479; G683717;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9415; G872313; -.
9416; G872313; -.
9416; G872313; -.
P$00472; SMALL_CYTOKINES_CC; 1.
P$00472; SIGNAL; INFLAMMATORY RESPONSE.
BY SIMILARITY.
BY SIMILARITY ON OCCUPANCIAL PROTEIN
MONOCYTE CHEMOTACTIC PROTEIN
MONOCYTE CARBOXYLIC ACID (
                                          10;
                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CHEMOKINE CC)
                                                                                                                                                               CHEMOTAXIS;
                                                                                     99 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99
                                                                                               34
35
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35
                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             84
12
                                                    91.5%;
83.3%;
                                                                                     10903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10976 MW;
                                                                                                                                                                                                                                                                                                                              CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          59
75
                                                                                                           59
                                                                                                                              23
24
                                                                                                                                                              SIGNAL;
                                                                                                                                                                                                        HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY)
TO THE INTERCRINE BETA FAMILY (SMALL CYTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY) TO THE INTERCRINE BETA FAMILY (SMALL CYTO
                                                                                      XV.
                                                                                             AL; HEPĀRIN-BINDING; INFLAMMATORY
BY SIMILARITY.
MONCYTE CHEMOTACTIC PROTEIN 2
PYRROLIDONE CARBOXYLIC ACID (B)
SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
                                                   Score 86;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 88; DB 1; I
Pred. No. 7.89e-08;
1; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
                                                                                     B7620BCF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ECC3AFB4 CRC32;
                                          Mismatches
                                                    86; DB 1; I
No. 2.44e-07;
                                                                                     CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                              Length 99;
                                                                                                                                                              INFLAMMATORY RESPONSE
                                                                                                                                                                                                                                         MONOCYTES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                         Indels
                                                                                                                                                                                                                                                                         WUTTKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99;
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                                                                                                                                                                                                                                         THIS PROTEIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                         0;
                                                                                                                                                                                                                                                                          W.W.
                                                                                                                                                                                                         CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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Best Local S
Matches
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Q09141;
Q1-NOV-1995
Q1-NOV-1995
15-JUL-1998
                                                                                                                                                                                                                                                                                                                                     MEDLINE; 97113354.
GARCIA-ZEPEDA E.A., COMBADIERE C.,
LAVIGNE F., HAMID Q., MURPHY P.M.,
J. IMMUNOL. 157:5613-5626(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 4 PRECURSOR (MCP-4) (MONOCYTE CHEMOATTRACTICL PROTEIN 4) (CK-BETA10) (NCC-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
CHEMOATTRACTANT PROTEIN 2).
TISSUE=FETAL;
MEDLINE; 97341179.
BERKHOUT T.A., SAF
                                                                                                                                         UGUCCIONI M., LOETSCHER P., FORE
LI Y., KREIDER B., GAROTTA G., I
J. EXP. MED. 183:2379-2384(1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHAIN
MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE-HEART;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WEMPE F., HANES J., SCHEIT K.H.;
DNA CELL BIOL. 13:1-8(1994).
-!- FUNCTION: CHEMOTACTIC FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                    MEDLINE;
                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HOMO SAPIENS (HUMAN)
EUKARYOTA; METAZOA; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q99616;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MCP4_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. MEDLINE; 94114084.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EUTHERIA; ARTIODACTYLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SCYA8 OR MCP2
                                                                                  SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                73 DVCADPKQKWVQ ::||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \vdash
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EICADPSQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               $67954; E118856; -. $67956; G544997; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                              96235049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PS00472;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99
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35
AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24
24
     SARAU H.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SMALL_CYTOKINES_CC; 1.
XIS; SIGNAL; HEPARIN-BINDING;
23 BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     84
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10900
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75.0%;
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                                                                                        AND
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 59
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24
                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                        SEQUENCE
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     MOORES K.,
                                                                                                                                                                          FORSSMANN
G., THELEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
Pred.
2; M
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BY SIMILARITY.
9BA2CD26 CRC32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PYRROLIDONE CARBOXYLIC SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MONOCYTE CHEMOTACTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       86; DB 1;
No. 2.44e-07
                                                                                                                                                                                                                                                                                                                                                                     ROTHENBERG M.E.,
LUSTER A.D.;
                                                                                                                                                                                                                                                                                      17-98
                                                                                        22-33
                                                                                                                                                                          . ;
Z (
     WHITE J.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTRACTS MONOCYTES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A
                                                                                                                                                                          DEWALD B.,
BAGGIOLINI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFLAMMATORY RESPONSE
     ELSHOURBAGY N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
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ACID (BY
                                                                                                                                                                                                                                                                                                                                                                                                   SARAFI M.N.,
                                                                                                                                                                          M.;
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                                                                                                                                                                                                    LIMA S.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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Best Local S
Matches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -: MASS SPECTROMETRY: MM-9314; MM_ERR-30; METHOD-MALDI; RANGE-17-98.
-: MASS SPECTROMETRY: MM-8760; MW_ERR-30; METHOD-MALDI; RANGE-22-98.
-: MASS SPECTROMETRY: MM-8775; MM_ERR-30; METHOD-MALDI; RANGE-24-98.
-: INDUCTION: BY INTERLEUKIN-1 AND TNF-ALPHA.
-: TISSUE SPECIFICITY: WIDELY EXPRESSED. FOUND IN SMALL INTESTINE,
-: THYMUS, COLON, LUNG, TRACHEA, STOMACH AND LYMPH NODE. LOW LEVELS
-: THYMUS, COLON, TAND HERRY SMOOTH MUSCLE CELLS.
-: THIS PROTEIN CAN BIND HEPARIN.
-: THIS PROTEIN CAN BIND HEPARIN.
-: PTM: ONE MAJOR ISOFORM MCP-4, AND TWO MINOR ISOFORMS (LA)MCP-4 AND (FNPGCLA)MCP-4 AND THE FRENTIAL SIGNAL CLEAVAGE.
-: SIMILABITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC).
-- CO) (CHEMOKINE CC).
-- EMBL; J046767; G1732123; -.
                                                                                                                                                                                             MCPA_BOVIN STANDARD; PRT; 99 AA. P28291; 01-DEC-1992 (REL. 24, CREATED) 01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE) 01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE) MONOCYTE CHEMOTACTIC PROTEIN 1A PRECURSOR (MCSEMINAL FLUID PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CARBOHYD
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPELBAUM E., REAPE T.J., BRAWNER M., MAKWAWA J., SCHMIDT D.B., IMBURGIA C., MACULTY D., MATTHEWS J. C'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPHEE C.J. BIOL. CHEM. 272:16404-16413(1997).
TISSUE-SEMINAL PLA
MEDLINE; 92181448
WEMPE F., EINSPAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHAIN
                                                                                                SEQUENCE FROM N.A. TISSUE-SEMINAL PLA MEDLINE; 92096117.
                                                                                                                                                                       BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MIM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DANTE M., GIBSON A.;
SUBMITTED (AUG-1997)
                                                                       DNA CELL
                                                                                        WEMPE
                                                                                                                                                           EUTHERIA; ARTIODACTYLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE;
                                                                                                                                                                                                                                                                                                                                                                           72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES,

BASOPHILS AND EOSINOPHILS, BUT NOT NEUTROPHILS. SIGNALS THROUGH

CCR2B AND CCR3 RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF

LEUKOCYTES AT BOTH SIDES OF ALLERGIC AND NONALLERGIC INFLAMMATION.

MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL

WALL DURING THE DISEASE PROCESS OF ARTHEROSCLEROSIS. MAY PLAY A

ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO

EXOGENOUS PATHOGENS.
                                                                                                                                                                                                                                                                                                                                               EICADPSQKWVQ
                                                                                                                                                                                                                                                                                                                                                                          EICADPKEKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                        10;
                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                       BIOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PS00472; SMALL_CYTOKINES_CC; 1
 EINSPANIER R.,
                                                                      HENSCHEN A., SCHEIT K.H.; 3IOL. 10:671-679(1991).
                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AA;
                            PLASMA;
                                                                                                                 PLASMA;
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 SCHEIT K.H.;
                                                                                                                                                                                                                                                                                                                                                                                                      Score
Pred.
1; M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GLYCOPROTEIN; INFLAMMATORY RESPONSE.
                                                                                                                                                                        VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DF52F6EC CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                     85; DB 1;
No. 4.29e-07
                                                                                                                                                                        TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                               (MCP-1A)
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                                                                                                                                                                                                                (MCP-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                      98
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RANGE-17-98.
RANGE-22-98.
RANGE-24-98.
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                                                                                                                                                                                                                                                                                                                                                                                                        0,
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Best Local S
Matches 1
 Query Match
Best Local
                                                                                                            DISULFID
DISULFID
CARBOHYD
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DISULFID
SEQUENCE
                                                                         CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE;
CYTOKINE;
                                                                                                                                                                                                                                                                                     EMBL;
                                                                                                                                                                                                                                                                                                                                                                                    MEDIANE: 9122340...
YOSHIMURA T., YUHKI N.;
TMMUNOL. 146:3483-3488(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C-C) (CHEMOKINE CC).
EMBL; L32659; G624394; -.
EMBL; M84602; G163395; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.

MEDLINE; 9438337.

WEMPE F., KUHLMANN J.K., SCHEIT K.H.;

BIOCHEM. BIOPHYS. RES. COMMUN. 202:1272-1279(1994).

-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BIOCHEM.
                                                                                                                                                                                                                                                                                                                                NEUTROPHILS.
-!- SUBUNIT: MONOMER OR HOMODIMER: IN EQUILIBRIUM (BY SIMILARITY)
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORYCTOLAGUS CUNICULUS (RABBIT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MCP1_RABIT 
P28292;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NEUTROPHILS: NELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                          SEQUENCE
                                                                                                                                                                                      MOD_RES
                                                                                                                                                                                                                               SIGNAL
                                                                                                                                                                                                                                                                    PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-NEW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PIR;
                                                                                                                                                                                                                                                CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EUTHERIA; LAGOMORPHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HSSP;
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JC2336; JC2336.
; P13500; 1MCA.
                                                                                                                                                                                                                                                                                 M57440; G165470; -. P13500; 1MCA.
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10; Conser
 Similarity
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PS00472;

CHEMOTAXIS; 51.

1 23

1 125
                                                                                                                                                                                                                                           PS00472; SMALL_CYTOKINES_CC; 1.
; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3500; IMCA.
PS00472; SMALL_CYTOKINES_CC;
CHEMOTAXIS; SIGNAL.
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                                                                                                                                                                                                                                                                                                                        (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZEALAND WHITE;
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35
AA;
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83.3%;
 88.3%;
90.9%;
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75
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                                                          MW:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE-SPLEEN;
                                                                                                          PYRROLIDONE CARBOXYLIC F
SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
POTENTIAL.
Score 83;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BY SIMILARITY.
BY SIMILARITY.
C8F5821D CRC32
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Pred. No. 7.51e-07;
1; Mismatches 1
                                                                     POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PYRROLIDONE CARBOXYLIC ACID (BY SIMILARITY).
                                                                                                                                                                                                        BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
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MONOCYTE CHEMOTACTIC PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                        FBAC9D27 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                              THAT ATTRACTS MONOCYTES,
DB 1; I
1.31e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 125
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                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                        ACID (BY
                                                                                                                                                                                                                                              GLYCOPROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MAMMALIA;
                                                                                                                                                                                                                                                                                                                                        (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BUT NOT
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DE EOTAXIN PRECURSOR (RAT).

SULT.

P97545; 008780;

15-JUL-1998 (REL. 36, CREATED)

T 15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)

JT 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)

DE EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTE)

COMMUNICATION NORVEGICUS (RAT).
                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                         DISULFID SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE=LUNG, AGDLINE; 96004658.
ROTHENBERG M.E., LUSTER A.D.,
ROTHENBERG M.E., LUSTER A.D.,
ROTHENBERG M.E., LUSTER A.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     P48298;
01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PRO
                                                                                                                                                                                                                                                                DISULFID
                                                                                                                                                                                                                                                                             CHAIN
                                                                                                                                                                                                                                                                                       SIGNAL
                                                                                                                                                                                                                                                                                                                                    C-C) (CHEMOKINE CC).
EMBL; U26426; G995911; -.
EMBL; U40672; G1113937; -.
MGD; MGI:103576; SCYA11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IMMUNITY 4:1-14(1996).

-I- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTE DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS (A PROMINENT FEATURE OF ALLERGIC INFLAMMATORY REACTIONS), BUT NOT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GONZALO J.-A., JIA G.-Q., AGUIRRE JENKINS N.A., LIN G.-S., KATZ H., GUTIERREZ-RAMOS J.-C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN=C57BL/6J; 1
MEDLINE; 96158746.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SCYA11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EOTA_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                     -!- PTM: O-GLYCOSYLATED (PF
                                                                                                                                                                                                                                                                                                                                                                                                            CELLS), INTESTINE, HEART, SPLEEN, KIDNEY.
-!- INDUCTION: BY INTERFERON-GAMMA AND LIPOPOLYSACCHARIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EUTHERIA;
                                                                                                                                                                                                                                                                                                    INFLAMMATORY
                                                                                                                                                           71 EICADPKKKWVQ
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                                                                                                                                                                                                                                                                                                                                                                                                                   LYMPHOCYTES, MACROPHAGES OR NEUTROPHILS.
SUBCELLULAR LOCATION: EXTRACELLULAR.
TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN THE THYMUS.
EXPRESSION INDUCIBLE IN THE LUNG (TYPE I ALVECLAR EPITHELIAL
CELLS), INTESTINE, HEART, SPLEEN, KIDNEY.
                                                                                                                                           |||||| ||||
EICADPSQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ICADPKQKWVQ
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                                                                                                                                                                                         h 87.2%;
Similarity 83.3%;
10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10;
                                                                                                                                                                                                                                                                                                              PS00472; SMALL_CYTOKINES_CC; 1. IL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RODENTIA
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24
32
33
7 AA;
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                                                                                                                                                                                                                                                                                                    RESPONSE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      84
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97
57
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                                                                                                                                                                                                                                                                                                                                                                                     THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                        Score 82;
Pred. No.
0; Misma
                                                                                                                                                                                                                                       POTENTIAL.
EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
F85A96BC CRC32;
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92:8960-8964(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            V., FRIEND D., COYLE A.J.,
LICHTMAN A., COPELAND N.G.,
                                                                                                                                                                                       ; DB 1; Lens
J. 2.28e-06;
Thes 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97
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                                 PROTEIN).
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                                                                                                                                                                                                                Length 97;
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RESULT TRESULT TO THE RESULT T
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Best Local S
Matches 1
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P55774;
01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
11-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 4 PRECURSOR (MIP-4) (PULMONARY AND MACROPHAGE INFLAMMATORY CROTEIN 4 PRECURSOR (MIP-4) (ALTERNATIVE ASSOCIATED CC CHEMOKINE PARC) (ALTERNATIVE ASSOCIATED CC CHEMOKINE 1) (AMAC-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CARBOHYD
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID DISULFID
                                                                                                                                                                                                          SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
TISSUE-AORTA, AND LUNG;
MEDLINE; 97376836.
HIESHIMA K., IMAI T., BABA M., SHOUDAI K., ISHIZUKA K.,
NAKAGAWA T., TSURUTA J., TAKEYA M., SAKAKI Y., TAKAYSUKI K.
MIURA R., OPDENAKKER G., VAN DAMME J., YOSHIE O., NOMIYAMA
J., IMMUNOL. 159:1140-1149(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS:
-i- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS,
-i- EDIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS,
-i- ERATURE OF ALLERGIC INFLAMMATORY REACTIONS (BY SIMI-
-i- SUBCELLULAR LOCATION: EXTRACELLULAR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; Y08358; E274141; -.
EMBL; U96637; G2098785; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. WILLIAMS C.M., NEWTON D.J., WILSON S.A., FLANAGAN B.F.;
DISCUSSION OF SEQUENCE MEDLINE; 97275308.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PATENT NUMBER US5504003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EUTHERIA; PRIMATES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EUTHERIA;
                                                                                            SUBMITTED
                                                                                                                                                           SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       71 EICADPKKKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -
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SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EICADPSQKWVQ
                                                                                         V., MUELLER C.,
ED (AUG-1997) TO
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10; Conse
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XY RESPONSE:
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larity 83.3%;
Conservative
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                                                                                                                                                           Z.A.
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                                                                                            POLITZ O., HAKIY EMBL/GENBANK/DDBJ
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Pred.
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L -> S (IN REF.
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BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05B4ED45 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82; DB 1; I
No. 2.28e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GLYCOPROTEIN;
                                                                                            N., OF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TETRAPODA;
                                                                                            ORFANOS
TA BANKS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                       C.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97;
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                                                                                                                       GOERDT
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Best Local S
Matches
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P51671; P50877; Q92490; Q92491;
01-OCT-1996 (REL. 34, CAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
ECTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DISULFID
DISULFID
SEQUENCE
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EMBL; Y13710; E321838; -.
PROSITE; PS00472; SMALL_CYTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        J. LEUKOC. BIOL. 61:545-550(1997).

J. LEUKOC. BIOL. 61:545-550(1997).

-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION INTO B CELL FOLLICLES IN LYMPH NODES.

-i- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN THE LUNG. A LOW LEVEL EXPRESSION IS SEEN IN LYMPHOID TISSUES SUCH AS LYMPH NODE
   GARCIA-ZEPEDA E.A.,
                              TISSUE=PLACENTA;
MEDLINE; 97312708.
                                                                                                                                                                               BARTELS J., S
CHRISTOPHERS
                                                                                                                                                                                                                                                                                                                                               KITAURA M., NAKAJIMA T., IMAI T., H
TIFFANY H.L., MURPHY P.M., YOSHIE O
J. BIOL. CHEM. 271:7725-7730(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE=SMALL INTESTINE;
MEDLINE; 96205964.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE; 96189937.
PONATH P.D., QIN S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A. MEDLINE; 96181758. GARCIA-ZEPEDA E.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EUKARYOTA; METAZOA; EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SCYA11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          THYMUS AND APPENDIX.

-I- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS)
                                                                                          SEQUENCE
                                                                                                                                                    BIOCHEM.
                                                                                                                                                                                                                                      MEDLINE;
                                                                                                                                                                                                                                                                 TISSUE-FORESKIN;
                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             J. CLIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MACKAY C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SMITH H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LUSTER A.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HOMO SAPIENS (HUMAN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                68 QICADPNKKWYQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             _
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                             FROM
                                                                                                                                                 BIOPHYS.
                                                                                                                                                                                                                                  96374440.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INVEST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SHI X., GONZALO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2:449-456(1996).
                                                                                                                                                 , SCHLUETER C., R
RS E., SCHROEDER
IOPHYS. RES. COMM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             89 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97:604-612(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9849 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        86.2%;
75.0%;
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   ROTHENBERG
                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ROTHENBERG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   54
54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RINGLER D.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFLAMMATORY
                                                                                                                                                                         RICHTER R J.M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    J.A., NEWMAN W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score
Pred.
2; M
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BY SIMILARITY.
BY SIMILARITY.
052AA3DC CRC32;
                                                                                                                                                                                                                                                                                            OF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERTEBRATA; TETRAPODA; MAMMALIA;
   M.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        M.E., OWNBEY T.R., LEDER
                                                                                                                                                 225:1045-1051(1996)
                                                                                                                                                                                                                                                                                            60-65
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                                                                                                                                                                                                       Ε.
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                                                                                                                                                                                                                                                                                                                                                                                                            HARADA S., COMBADIERE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLARK-LEWIS I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESPONSE;
   WEREMOWICZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; L
3.96e-06;
                                                                                                                                                                                                                                                                                            AND
                                                                                                                                                                                                          NOSO N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                            75-88,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GUTIERREZ-RAMOS J.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ۲.
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   s.,
                                                                                                                                                                                                                                                                                               AND VARIANTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WANG J., KASSAM
      SARAFI M.N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      89
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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RESULT
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C :- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROJECT: PROMOTES THE ACCUMULATION OF EOSINOPHILS, A PROMINE; C:- FEATURE OF ALLERGIC INFLAMMATORY REACTIONS.

C :- SUBCELLULAR LOCATION: EXTRACELLULAR.

C :- SUBCELLULAR LOCATION: EXTRACELLULAR.

C :- INDUCTION: BY THE-ALPHA, IL-1-ALPHA AND INTERFERON GAMMA.

C :- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTO).

C :- EMBL; U46573; G180441; -.

REMBL; U46573; G180440; -.

REMBL; 275668; E251275; -.

REMBL; 275669; -.

REMBL; 275669; -.

REMBL; 275669; -.

REMBL; 275669; -.

REMBL; 
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q62401;
01-NOV-1997
01-NOV-1997
15-JUL-1998
MONOCYTE CHEN
                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE; 97079149.
JIA G.-Q., GONZALO J.A., LLOYD C.,
WERSHIL B.K., GUTIERREZ-RAMOS J.C.,
J. EXP. MED. 184:1939-1951(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
DISULFID
VARIANT
VARIANT
       SARAFI M.N., GARCIA-ZEPEDA E.A., MACLE LUSIER A.D.;
J. EXP. MED. 185:99-109(1997).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VARIANT
VARIANT
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BARTELS J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SCYA12 OR MCP5.
MUS MUSCULUS (MOUSE)
EUKARYOTA; METAZOA;
                                                                                                                                              SEQUENCE FROM N.A. MEDLINE; 97149438.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHEMOKINE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                           EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MCP5_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE; PS00472; SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             71 DICADPKKKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EICADPSQKWVQ 12
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1997 (REL. 35, 1
1998 (REL. 36, 1
E CHEMOTACTIC P
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SCHLUETER C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .C., LUSTER A.D.;
41:471-476(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             86.2%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    , CREATED)
, LAST SEQUENCE UPDATE;
, LAST ANNOTATION UPDATE;
PROTEIN 5 PRECURSOR (MCP-5) (MCP-1 RELATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          POLYMORPHISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KULKE R., CHRISTOPHERS E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WW.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 81;
Pred. No.
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BY SIMILARITY.
BY SIMILARITY.
L -> P (IN CLONE 3
A -> T (IN CLONE 3
R -> S (IN CLONE 5
R -> R (IN CLONE 5)
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                                                                                                              MACLEAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
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                                                                                                                                                                                                                                                                                                                    KREMER
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          ATTRACTS
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3.96e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CRC32;
                                                                                                          J.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ą
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                534).
53).
                                                                                                                                                                                                                                                                                                                    G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ?
                                                                                                              CHARO
          EOSINOPHILS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIGNAL;
                                                                                                                                                                                                                                                                                                                 ۲.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SCHROEDER J.M.,
                                                                                                          I.F.
                                                                                                                                                                                                                                                                                                                    MARTINEZ A.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A PROMINENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
          MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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C CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC
C INFLAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A
C PIVOTAL ROLE DUBLING EARLY STAGES OF ALLERGIC LUNG INFLAMMATION.
C -!- SUBUNIT: HOMODIMER (BY SIMILARITY).
C -!- TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND
C THYMUS. ALSO FOUND IN THE SALIVARY GLANDS CONTAINING LYMPH NODES,
C HEAST, HEART, LUNG, BRAIN, SMALL INVESTINE, KIDNEY AND COLON.
C -!- INDUCTION: BY IEN-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
C -- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C -- C) (CHEMOKINE CC).
R EMBL; U50712; G1477582; -.
R EMBL; U50712; G1477582; -.
R EMBL; U50712; C74717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DISULFID
DISULFID
SEQUENCE
                             -!- SIMILARITY: 1
-!- SIMILARITY: 1
C-C) (CHEMOK:
                                                                                                                                                                                                                                                                                                                                                                                                                          Ol-MAR-1989 (REL. 10, CREATED)
Ol-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
Ol-MAR-1989 (REL. 34, LAST ANNOTATION UPDATE)
Ol-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA)
(TONSILLAR LYMPHOCYTE LD78 ALPHA PROTEIN) (GOS19-1 PROTEIN) (SIS-BETA)
(PAT 464.1) (SMALL INDUCIBLE CYTOKINE A3).
SCYA3 OR MIP1A.
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                  BLUM S.,
DNA CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MIIA_HUMAN
P10147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; U666/U; GAULTINES CC; 1.
MGD; MGI:108224; SCYA12.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
PROSITE: PS00472; SMALL_CYTOKINES.
                                                                          SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

MEDLLINE; 90287155.

NAKAO M., NOMIYAMA H., SHIMADA K.;

MOL. CELL. BIOL. 10:3646-3658(1990).

-!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.

-!- INDUCTION: BY TPA OR PHA (TPA = 12-O-TETRADECANOYL PHORBOL-13

ACETATE (TUMOR PROMOTER); PHA = PHYTOHEMAGGLUTININ (T-CELL
                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE; 86223879.
OBARU K., FUKUDA M., MAEDA S.,
J. BIOCHEM. 99:885-894(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CYTOKINE; CHEMOTAXIS; SIGNAL 1 22
                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. MEDLINE; 89140347.
                                                                                                                                                                                                   SEQUENCE FROM N.A.
MEDLINE; 9110387 9.
BLUM S., FORSDYKE
BLUM S., FORSDYKE
DNA CELL BIOL. 9:589-602(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                   EUTHERIA; PRIMATES
                                                                                                                                                                                                                                                              ω
                                                                                                                                                                                                                                                                                     IPFEL P.F., BALKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              72
                                                                                                                                                                                                                                                                          IMMUNOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 EICADPSQKWV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EICADPKEKWV
-C) (CHEMOKINE CC).
D00044; D1000469; -.
M23452; G188559; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
9; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 104 AA;
                                                                                                                                                                                                                                                                         , BALKE J., IRVING S.G., 142:1582-1590(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       83.0%;
larity 81.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STANDARD;
                                          LD78-ALPHA
BELONGS TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82
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58
74
11659
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                                            THE
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Pred. No. 2.04e-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; INFLAMMATORY RESPONSE.
BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                          -BETA ARE INTERCRINE
                                                                                                                                                                                                                                                                                                                                                             SHIMADA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08FA6C35
                                                                                                                                                                                                                D.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                        KELLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CRC32;
                                          VERY (
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                                            CLOSELY
A FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 104;
                                                                                                                                                                                                                                                                                        SIEBENLIST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                          RELATED.
(SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                        u.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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RESULT TO PART OF THE PART OF 
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Best Local Similarity
Matches 8; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; M25315; G602453; -.

EMBL; X03754; G758089; -.

EMBL; X04018; G34297; ALT_SEQ.

EMBL; M33178; G182847; -.

EMBL; M33178; G182847; -.

EMBL; D90144; G219906; -.

EMBL; D90144; G219906; -.

PIR; A30574; A30574.

HSSP; P13236; 1HUM.

MIM; 182283; -.

PROSITE; PS00472; SWALL_CYTOKINES_CC; 1.

PROSITE; PS00472; SWALL_CYTOKINES_CC; 1.

CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONS SIGNAL 1 22 POTENTIAL.

CHAIN 23 92

MACROPHAGE IN DISULFID 33 57

BY SIMILARITY DISULFID 34 10055 M3. COLUMNIARITY SIGNAL 23 92

DISULFID 34 10055 M3. COLUMNIARITY DISULFID 34 10055 M3. COLUMNIARITY
                   SEQUENCE FROM N.A. MEDLINE; 91373378. NAPOLITANO M., MODI LEONARD W.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MIIB_HOMAN STANDARD; PRT; 92 AA.

P13236; P22617; Q13704;

01-JAN-1990 (REL. 13, CREATED)

01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)

01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)

01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)

ACTIVATION PROTEIN 2) (ACT-2) (PAT 744) (H400) (SIS-GAMMA) (LYMPHOCYTE ACTIVATION GENE-1 PROTEIN) (LAG-1) (HC21) (SMALL INDUCIBLE CYTOKINE ACTIVATION GENE-1 PROTEIN) (LAG-1) (HC21) (SMALL INDUCIBLE CYTOKINE ACTIVATION GENE-1 PROTEIN) (LAG-1) HC21) (SMALL INDUCIBLE CYTOKINE ACTIVATION GENE-1 PROTEIN).

SCYA4 OR MIPJB OR LAGI.

HOMO SAPIENS (HUMAN).

EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.

MEDLINE; 91061800.

BAIXERAS E., ROMAN-ROMAN S., JITSUKAWA S., G:
VIEGAS-PEQUIGNOT E., HERCEND T., TRIEBEL F.;

MOL. IMMUNOL. 27:1091-1102(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
MEDLINE; 89093958.
BROWN K.D., ZURAWS
                                                                                                                                         MEDLINE; 89325421.
CHANG H.C., REINHERZ E.L.;
CUR. J. IMMUNOL. 19:1045-1051(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.

MEDLINE; 89140347.

ZIPFEL P.F., BALKE J., IRVING S.

J. IMMUNOL. 142:1582-1590(1989).
                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                     MOL. IMMUNOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE; 89071764.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LIPES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    71 QVCADPSEEWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                             DWN K.D., ZURAWSKI S.M., MOSMANN T.R.,
IMMUNOL. 142:679-687(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1
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EICADPSQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          M.A.,
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23
33
34
? AA;
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ACAD. SCI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
266:17531-17536(1991).
                                            MODI W.S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82
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                                            CEVARIO S.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JEANG K.-T., CHANG N.T.,
.A. 85:9704-9708(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 77; DB 1; I
Pred. No. 3.51e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MACROPHAGE INFLAMMATORY
BY SIMILARITY.
BY SIMILARITY.
C24DD919 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           s.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESPONSE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KELLY
                                            GNARRA J.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZURAWSKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₹.
                                                                                                                                                                                                                                                                                                                                 GENEVEE
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                                                                                                                                                                                                                                                                                                                                   ი
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                                               SEUANEZ H.N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROTEIN 1-ALPHA
                                                                                                                                                                                                                                                                                                                                      MECHICHE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ₫.;
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                                                                                                                        Matches
                                                                                                                               Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                               EMBL; M23502; G533213; -.

EMBL; M25316; G602455; -.

EMBL; M25316; G602455; -.

EMBL; X53683; G34218; -.

EMBL; X53683; G34218; -.

EMBL; X53683; G32036; -.

EMBL; X53682; E35870; ALT_SEQ.

EMBL; M69203; G132376; JOINED.

EMBL; M69203; G1332376; JOINED.

EMBL; M69203; G1332376; JOINED.

EMBL; M57503; G339727; -.

EMBL; M57503; G339727; -.

PIR; B30574; B30574.

PIR; D30552; D30552.

PIR; J100319; J40319.

PIR; J40319; J40319.

PIR; J7411; A37411.

PDB; 11UN; 30-APR-94.

MIM; 182284 -.

PROSITE; PS00472; SMALL_CYTOKINES

CYTOKINE; CHEMOTAXIS; INFLAMMATOR
          01-AUG-1990
01-AUG-1990
01-NOV-1997
                                                                                                                                                                                                                                              SIGNAL
CHAIN
DISULFID
DISULFID
CONFLICT
CONFLICT
CONFLICT
CONFLICT
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CONFLICT
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CONFLICT
                                     MI10_HUMAN
P16619;
                                                                                                                                                           TURN
HELIX
SEQUENCE
                                                                                                                                                                                      STRAND
HELIX
STRAND
STRAND
STRAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -!- FUNCTION: MONOKINE WITH INFLAMMATORY AND
-!- SUBUNIT: HOMODIMER.
-!- INDUCTION: BY MITOGENS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETOCOLUMN (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 94182137,
LODI P.J., GARRETT D.S., KUSCEWSKI J.,
LEONARD W.J., GEONGENBORN A.M., CLORE G.
SCIENCE 263:1762-1767(1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE OF 6-92 FROM N.A.
MEDLINE; 90038522.
MILLER M.D., HATA S., WAAL MALEFYT R.,
J. IMMUNOL. 143:2907-2916(1989).
01-AUG-1990 (REL. 15, CREATED)
01-AUG-1990 (REL. 15, LAST SEQUENCE UPDATE)
01-AUG-1990 (REL. 35, LAST ANNOTATION UPDATE)
TONSILLAR LYMPHOCYTE LD78 BETA PROTEIN PRECURSOR (GOS19-2 PROTEIN)
                                                                                                                                                                                                                                     STRAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRUCTURE BY NMR
                                                                                 72 QVCADPSESWVQ
::||||: |||
1 EICADPSQKWVQ
                                                                                                                      h 81.9%;
Similarity 66.7%;
8; Conservative
                                                                                                                                                           STANDARD;
                                                                                   12
                                                                                                                                                                                                                                                                                                                                                            SMALL_CYTOKINES_CC;
                                                                                                    83
                                                                                                                                                           INFLAMMATORY RESPONSE; SIGNAL;
                                                                                                                                                                                                                                           MACROPHAGE INFLAMMATORY P
BY SIMILARITY.
BY SIMILARITY.
T -> C (IN REF. 7).
A -> S (IN REF. 6).
P -> L (IN REF. 2).
ARKLPR -> REASS (IN REF. ...
S -> I (IN REF. 7).
S -> G (IN REF. 7).
S -> T (IN REF. 7).
                                                                                                                      Score 77; DB 1; I
Pred. No. 3.51e-05;
3; Mismatches 1
                                              PRT;
                                                                                                                                                            F18E7AFD
                                              93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TSANG
                                                                                                                                                            CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KRANGEL M.
                                              A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        X.E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHEMOKINETIC
                                                                                                                                         Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .s.,
                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                 PROTEIN 1-BETA
                                                                                                                                                                                                                                                                                                                                                  3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WEATHERBEE
                                                                                                                                                                                                                                                                          ω
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROPERTIES
                                                                                                                        0;
                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         J.A.,
                                                                                                                        0
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RESULTATION OF THE PROPERTY OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOL. CELL. BIOL. 10:3646-3658(1990).

CC -!- SIMILARITY: 464.1 AND 464.2 ARE VERY CLOSELY RELATED.

CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC).

CC C-() (CHEMOKINE CC).

DR EMBL; M24110; G182849; -.

DR EMBL; D90145; G219908; -.

DR EMBL; B39908; B30908.

R PIR; B395673; B35673.

R PIR; B35673; B35673.

R PIR; S10157; S10157.

R HSSP; P13236; 1HUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches
                                                                                                                                                                                                                                                                                                          01-JUN-1994 (REL. 2
01-OCT-1996 (REL. 3
15-JUL-1998 (REL. 3
EOTAXIN PRECURSOR (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (PAT 464.2).
SCYAAJI OR 464.2.
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HSSP; F1.
MTM; 601395;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE;
BLUM S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA CELL
SEQUENCE FROM N.A.
MEDLINE; 95091818.
JOSE P.J., ADCOCK I.M., GR.
WELLS T.C., WILLIAMS T.J.,
                                                                                                                                                                     TISSUE-LUNG
                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                              EUKARYOTA;
EUTHERIA; 1
                                                                                                                                                                                                                                               CAVIA PORCELLUS (GUINEA PIG). EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. MEDLINE; 91103879.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BURD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE=BLOOD;
                                                                                                   ROTHENBERG M.E., LUSTER A.D., LILLY C.M., EXP. MED. 181:1211-1216(1995).
                                                                                                                                                MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                             P80325
                                                                                                                                                                                                                                                                                                                                                                                                                EOTA_CAVPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUCLEIC ACIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LRVING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       72
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                                                                                                                                                                                                                                                                                                                                                                                                                                     19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               P.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EICADPSQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E; 90287702.
S.G., ZIPFEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
8; Conse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PS00472; SMALL_CYTOKINES_CC;
                                                                                                                                              95173589.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FORSDYKE R.E., FORSDYKE D.R.;
BIOL. 9:589-602(1990).
                                                                                                                                                                                                                              RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ., ZIPFEL P.F., BALKE J., MC
SIEBENLIST U., KELLY K.;
IDS RES. 18:3261-3270(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                      29, CREATED)
34, LAST SEQUENCE UPDATE)
36, LAST ANNOTATION UPDATE)
(EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10161 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81.9%;
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58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL.
  GRIFFITHS-JOHNSON
J., POWER C.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BALKE J., MCBRIDE KELLY K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 77;
Pred. No. (
3; Mismat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LD78 BETA / GOS19-2 /
BY SIMILARITY.
BY SIMILARITY.
21EDDB04 CRC32;
                                                                                                                                                                                                                                                 VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1; L
3.51e-05;
                     D.A.,
                                                                                                                        DRAZEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 93;
                     BERKMAN
                                                                                                                      J.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MORTON C.C.,
                                                                                                                        LEDER P.;
                     Z
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Best Local S
Matches
-!- SUBUNIT: HOMODIMER.
-!- SIMILARITY: BELONGS TO THE INTERCRINI C-X-C) (CHEMOKINE CXC).
EMBL; X78306; G463254; -.
EMBL; X78436; G786591; -.
PIR; S42496; S42496.
HSSP; P10145; 31L8.
PROSITE; PS00471; SMALL_CYTOKINES CXC; 1.
CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPON
                                                                              SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

MEDLINE; 95137691.

SEOW H.F., YGOSHIMURA T., WOOD P.R., COLDITZ I.G.

IMMUNOL. CELL BIOL. 72:398-405(1994).

IMMUNOTION: IL-8 IS A CHEMOTACTIC FACTOR THAT

BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES.

NEUTROPHIL ACTIVATION. IT IS RELEASED FROM

NEUTROPHIL ACTIVATION. STIMULUS.
                                                                                                                                                                                                                                                                     ILT 20
IL8_SHEEP
P36925;
01-JUN-1994
01-JUN-1994
01-NOV-1995
                                                                                                                                                                                                                                OVIS ARIES EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                          CARBOHYD
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHAIN
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE; 95121931.
LEGASTELOIS I., GREENLA
GENE 150:367-369(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; U18941; G687656; -. EMBL; X77603; G602552; -.
                                                                                                                                                                                                                          EUTHERIA;
                                                                                                                                                                                                                                                             01-JUN-1994 (REL. 29, CREATED)
01-JUN-1994 (REL. 29, LAST ESCUENCE UF
01-NOV-1995 (REL. 32, LAST ANNOTATION
INTERLEUKIN-8 PRECURSOR (IL-8).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE; PS00472; SMALL_CYTOKINES_
EOSINOPHIL; CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 94157409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE OF 24-96.
STRAIN-HARTLEY; TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BIOCHEM. BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                    71 ICADPKKKWVQ
                                                                                                                                                                                                                                                                                                                                                  N
                                                                                                                                                                                                                                                                                                                                                  ICADPSQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P13500;
                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                          ARTIODACTYLA.
                                                                                                                                                                                                                                 (SHEEP).
METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                            Y RESPONSE.

1 23
24 96
31 56
31 72
9 93
88
10753 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                          1
24
31
32
93
88
8A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IMCA.
                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                   GREENLAND T.,
                                                                                                                                                                                                                                                                                                                                                  12
                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                               80.9%;
81.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMUN. 205:788-794(1994).
                                                                                                                                                                                                                                                                                                                                                                                               Score 76; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                          EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
POTENTIAL.
D -> G (IN REF. 1)
D D28C7E5 CRC32;
                                                                                                                                                                                    ARNAUD
                                                                                                                                                                                                                                 VERTEBRATA; TETRAPODA;
                                                                                                                                                                                                                                                                                                            PRT;
                                                                   INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   _CC; 1.
GLYCOPROTEIN;
 RESPONSE; SIGNAL.
                                                                                            FACTOR THAT ATTRACTS NEUTROPHILS, MONOCYTES. IT IS ALSO INVOLVED IN LEASED FROM SEVERAL CELL TYPES IN
                                                                                                                                    COLDITZ I.G.;
                                                                                                                                                                                                                                                                                UPDATE)
                                                                                                                                                                                   P., MORNEX J.F.,
                                                                                                                                                                                                                                                                                                            101
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                                                                                                                                                                                                                                                                                                                                                                                               DB 1; L
6.01e-05;
                                                                                                                                                                                                                                                                                                            AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                   2).
                                                                                                                                                                                                                                                                                                                                                                                                       Length 96;
                                                                                                                                                                                                                                                                                                                                                                                      2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                 MAMMALIA;
                                                                                                                                                                                    CORDIER G.;
                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROTEIN
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RESULT PION OF REAL PROPERTY OF STREET PION OF STREET
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                                        Query Match
Best Local s
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-FEB-1995 (REL. )
01-FEB-1995 (REL. )
01-NOV-1995 (REL. )
INTERLEUKIN-8 PRECI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIGNAL
CHAIN
DISULFID
DISULFID
SEQUENCE
                                                                                 DISULFID DISULFID SEQUENCE
                                                                                                                                                                                                                                                         J. CLIN.
                                                                                                                           SIGNAL
                                                                                                                                              PROSITE;
                                                                                                                                                                   C-X-C) (CHEMOKINE CXC).
EMBL; D28772; G517100; -.
EMBL; D14285; G475152; -.
                                                                                                                                                                                                                                                                 KUKIELKA G.L., SMITH W.C., LAROSA G.J., MANNING A.M., MENDOZA L.H., DALY T.J., HUGHES B.J., YOUKER K.A., HAWKINS MICHAEL L.H., ROT A., ENYARA M.L.;
J. CLIN. INVEST. 95:89-103(1994).
                                                                                                                                                                                                                                                                                                 MEDLINE; 95114148
KUKIELKA G.L., SM
                                                                                                                                                                                                                                                                                                                                                    MATSUMOTO Y., MOHAMED A., ONODERA T., KATO H., CHASHI T.
GOITSUKA R., TSUJIMOTO H., HASEGAWA A., FURUSAWA S., YOS
ISHIKAWA J., HOTTA K., SUZUKI K., HIROTA Y.;
CYTOKINE 6:455-461(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CANIS FAMILIARIS (DOG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      P41324;
01-FEB-1995
                                                                                                                                                                                                                                                                                                                     STRAIN-MONGREL;
                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                               TISSUE-LYMPH NODE;
MEDLINE; 95127913.
                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                         GENE 131:305-306(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUTHERIA;
                     75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         75 EVCLDPKEKWVQ 86
_
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
_CANFA
                                                                                                                                                                                                  RESPONSE TO AN INFLAMMATORY SUBUNIT: HOMODIMER. SIMILARITY: BELONGS TO THE 1
                                                                                                                                                                                                                                 FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS, BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EICADPSQKWVQ 12
            EVCLDPKEKWVQ 86
EICADPSQKWVQ 12
                                         Similarity 66.7% 8; Conservative
                                                                                                                                                0308; G607814; -. PS00471; SMALL_C
                                                                                                                        PS00471; SMALL_CYTOKINES_CXC; 1.
CHEMOTAXIS; INFLAMMATORY RESPONSE;
1 22 BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                              94010328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CARNIVORA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   36422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A
A
                                                                                  AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                      TISSUE-JUGULAR VEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             31, CREATED)
31, LAST SEQUENCE UI
32, LAST ANNOTATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80.9%;
                                                                                              22
101
61
77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
61
77
                                                  80.9%;
                                                                                  11280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (IL-8).
                                                                                                                                                                                                                                                                                                                                                                                                                                                   HOTTA K.,
                                                                                  MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Æ
                                        Score 76;
Pred. No.
2; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY.
INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
                                                                                          INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 76;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERTEBRATA; TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                    INTERCRINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5A574527
                                                                                  7C49D62D
                                                                                                      SIMILARITY.
                                                                                                                                                                                                                         STIMULUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                    HIROTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        76; DB 1; 1
No. 6.01e-05
                                                 DB 1; I
6.01e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CRC32;
                                                                                 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                    ALPHA
                                                                                                                                     SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                    MIZUNO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 101;
                                                            Length 101;
                                        ?
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                                                                                                                                                                                                    FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                      Indels
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                                                                                                                                                                                                                                                                                                                                                                           YOSHIHARA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MAMMALIA;
                                                                                                                                                                                                  (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUZUKI
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                                                                                                                                                                                                                                                                                      I
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                                        Gaps
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Best Local s
Matches
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ILB_PIG STAN

P26894; P22951;

01-AUG-1991 (REL. 1

01-AUG-1992 (REL. 2

01-OCT-1996 (REL. 2
                                                                                                                                                            DISULFID
DISULFID
CONFLICT
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                               -I- SUBUNIT: HOMODIMER.
-I- TISSUE SPECIFICITY: ALVECLAR MACROPHAGES.
-I- INDUCTION: BY LIPOPOLYSACCHARIDE.
-I- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA
C-X-C) (CHEMOKINE CXC).
EMBL; M8093671 G164521; -.
EMBL; X61151; G516197; -.
EMBL; M993671 G1235612; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE: 91217086.

GOODMAN R.B., FORSTROM J.W., OSBORN S.G., CHI E.Y., MARTIN T.R.;
J. BIOL. CHEM. 266:8455-8463(1991).

-i- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 93041741.

GOODMAN R.B., FOSTER D.C., MATHEWES FORSTROM J.W., MARTIN T.R.;
BIOCHEMISTRY 31:10483-10490(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
MEDLINE; 94103307.
LIN G., PEARSON A.E., SCA
WEISS D.J., MURTAUGH M.P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                CHAIN
                                                                                                                                                                                                                                                                                                        CYTOKINE;
                                                                                                                                                                                                                                                                                                                                            PIR; A44253; A44253.
PIR; A39819; A39819.
HSSP; P10145; 3IL8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-YORKSHIRE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE OF 26-45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUBMITTED (MAR-1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GOODMAN R.B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A., AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUBMITTED (JUL-1991)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM
                                                                                                                                                                                                                                                                                     SIGNAL
                                                                                                                                                                                                                                                                                                                           PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EUTHERIA; ARTIODACTYLA.

 I) (AMCF-I).

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REVISION TO 23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ISSUE-LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BIOL.
                                      75
EICADPSQKWVQ
                                      EVCLDPKEKWVQ 86
                                                                            similarity 66.7%;
8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHEM. 269:77-85(1994)
                                                                                                                                                                                                                                                                                                                           PS00471; (
                                                                                                                                                                                                                                                                                                        CHEMOTAXIS
                                                                                                                                                        26
34
36
33
33
103
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REL. 23, LAST SEQUENCE UPDATE)

REL. 34, LAST ANNOTATION UPDATE)

PRECURSOR (IL-8) (ALVEOLAR MACROPHAGE CHEMOTACTIC FACTOR
                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                         SMALL
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61
77
34
                                                                                                                                                              11633
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                                                                                                                                                                                                                                                                                                        LL_CYTOKINES_CXC; 1.
INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SCAMURRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                              Ĭ
                                                                                                 Score 76; Pred. No.
                                                                              Pred.
2; N
                                                                                                                                                                             INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
RC -> CR (IN RE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R.W.,
                                                                                                                                                              A012D59D
                                                                            2 76; DB 1; Leg. No. 6.01e-05; Mismatches 2;
                                                                                                                                                            -> CR (IN REF. 
> KK (IN REF. 
)12D59D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZHOU Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        103
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OSBORN
                                                                                                                                                                                                                                                                                                        SIGNAL.
                                                                                                                                                                           2).
                                                                                                                    Length 103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BAARSCH M.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                Indels
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Best Local S
Matches
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DISULFID
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MCP1_RAT
P14844;
01-APR-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TIMMERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-APR-1990 (REL. 14, CREATED)
01-APR-1990 (REL. 14, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (IMMEDIATE-EARLY SERUM-RESPONSIVE JE PROTEIN).
SCYAZ OR JE OR MCP1.
                            STRAIN=CD-1; TISSUE=LUNG; MEDLINE; 95298037. SHI M.M., GODLESKI J.J.,
                                                                                                             MACROPHAGE INFLAMMATORY PROTEIN SCYA3 OR MIP1A.
                                                                                                                                01-OCT-1996 (REL. 34,
01-OCT-1996 (REL. 34,
01-NOV-1997 (REL. 35,
                   SHI M.M., GODLESKI J.J., PAULAUSKIS J.D.;
BIOCHEM. BIOPHYS. RES. COMMUN. 211:289-295(1995).
                                                            SEQUENCE FROM N.A.
                                                                                                   RATTUS NORVEGICUS (RAT)
                                                                                                                                                                         MI1A_RAT
 SEQUENCE FROM N.A
                                                                                 EUTHERIA;
                                                                                          EUKARYOTA; METAZOA;
                                                                                                                                                                P50229;
                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                    MOD_RES
                                                                                                                                                                                                                                                                                                                                                                CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                              PIR; JN0128; JN0128.
PIR; S07723; S07723.
                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; X17053; G55531; -. EMBL; M57441; G205334; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         YOSHIMURA T., TAKEYA M., TAKAHASHI K.;
BIOCHEM. BIOPHYS. RES. COMMUN. 174:504-509(1991)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN-WAG/RIJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RATTUS NORVEGICUS (RAT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                         IGNAL
                                                                                                                                                                                                                                                                                                                                                                                  YTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                      73
                                                                                                                                                                                                                                                        Local Similarity 75.0%; les 9; Conservative
                                                                                                                                                                                                                   مو
                                                                                                                                                                                    24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FUNCTION: CHEMOTACTIC FACTOR THAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NEUTROPHILS.
                                                                                                                                                                                                                  EICADPSQKWVQ
                                                                                                                                                                                                                                     EICADPNKEWVQ
                                                                                                                                                                                                                                                                                                                                                                                                      P13500;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            H.T.H.M., PRONK G.J., BOS J.L., ACIDS RES. 18:23-34(1990).
                                                                                                                                                                                                                                                                                                                                                                                              PS00472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              91128376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90174947.
                                                                                 RODENTIA.
                                                                                                                                                                                                                                                                                               34
35
126
148
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24
                                                                                                                                                                                                                                                                                                                                                                                                     1MCA
                                                                                                                                                                          STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-KIDNEY;
                                                                                                                                                                                                                                                                                                                                                                                SMALL_CYTOKINES_CC; 1.
XIS; SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.
                                                                                                                                                                                                                                     84
                                                                                                                                                                                                                                                                                                 59
75
126
16460
                                                                                                                                                                                                                                                                                                                                                   148
24
                                                                                                                                                                                                                                                                  80.9%;
                                                                                          CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                         CREATED)
LAST SEQUENCE UPDATE)
, LAST ANNOTATION UPDATE)
COV PROTEIN 1-ALPHA PRECURSOR
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                                                                                                                                                                                                                                                                  Score
Pred.
                                                                                                                                                                                                                                                                                                                    PYRROLIDONE CARBOXYLIC SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                POTENTIAL.
DB97F97C CRC32
                                                                                                                                                                                                                                                                                                                                                             BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                  76; DB 1; I
No. 6.01e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTRACTS
                                                                                                                                                                         92
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DER
                                                                                                                                                                                                                                                                            Length 148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EB A.J.;
                                                                                                                       (MIP-1-ALPHA)
                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                     ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIMILARITY).
(SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                   (BY
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Best Local S
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHAIN
DISULFID
DISULFID
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE; F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIJINE; 96183056.

MEDIJINE; 96183056.

BIOCHEM. BIOPHYS. RES. COMMUN. 220:945-948(1996).

BIOCHEM. BIOPHYS. RES. COMMUN. 220:945-948(1996).

-I- FUNCTION: MONKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTION.

HAS CHEMOTACTIC ACTIVITY FOR MONCYTES, NEUTROPHILS, EOSINOPHIL

BASOPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG TNR-ALPHA

PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AND FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE

PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR

PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR

PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR

PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR
                                                                                                                                         SCHULZ-KNAPPE P., MAEGERT H.-J., D
KUBBIES M., TOMECZKOWSKI J., KIRCH
KIST A., REINECKE M., SILLARD R.,
BAGGIOLINI M., FORSSMANN W.-G.;
                                                                                                                                                                                        SEQUENCE FROM N.A.,
TISSUE-BONE MARROW;
MEDLINE; 96136773.
                                                                                                                                                                                                                                         HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN-LONG EVANS; TISSUE-LUNG;
MEDLINE; 95238980.
SHANLEY T.P., SCHWAL H., FRIEDL
J. IMMUNOL. 154:4793-4802(1995).
        PARDIGOL A., MAEGERT
                                   SEQUENCE FROM N.A.
                                                                      PARDIGOL A., 1
SCHULZ-KNAPPE
                                                                                            TISSUE-LIVER;
                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -!- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
-!- SIMILARITY: BELONGS TO THE INTERCRINE B
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN-WISTAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF 24-57.
FORSSMANN W.-G.;
                      TISSUE=PLACENTA;
                                                          SUBMITTED
                                                                                                                                                                                                                                                                                                                                                                                                                71 QICADPKETWVQ
                                                                                                                                EXP. MED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADHESION MOLECULES REQUIRED
                                                                                                                                                                                                                                                                                                                                                                                                    EICADPSQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          U22414; G790633;
U06435; G459150;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PS00472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                          (MAY-1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HEPARIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24
34
35
6
57
92 AA;
                                                                                                                                                                                                                                                                                      (REL. 35, CREATED)
(REL. 35, LAST SEQUENCE UPDATE)
(REL. 35, LAST ANNOTATION UPDATE)
C-1 PRECURSOR (HCC-1) (NCC-2).
                                                                                MAEGERT
                                                                                                                                183:295-299(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SMALL_CYTOKINES_CC; 1.
XIS; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                    12
                                                                                                                                                                                                                                                                                                                                                                                                                           82
                                                                                                                                                                                                                                                                                                                                                                                                                                                             79.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10335
                                                                                                                                                                                                                   AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23
92
57
57
           н. -J.,
                                                           ö
                                                                               н.-Л.,
                                                                                                                                                                                                                  SEQUENCE OF 20-93
                                                           EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WW;
                                                                                                                                                    .-J., DEWALD B., I
, KIRCHHOFF K., RI
RD R., PARDIGOL A
                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 75; DB 1; I
Pred. No. 1.03e-04;
2; Mismatches 2
          CIESLAK
                                                                                ZUCHT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA. BY SIMILARITY.
BY SIMILARITY.
A -> T (IN REF. 2).
C -> W (IN REF. 2 AND 3).
F48CF89F CRC32;
                                                                                                                                                                                                                                                    VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    H.P.,
                                                                                H.D.,
           Α.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NEUTROPHIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JONES M.L., WARD P.A.;
                                                                                                                                                                                                                                                                                                                                                    93
                                                                                FORSSMANN W.-G
           TILH
                                                                                                                                                                                                                                                                                                                                                    ₽
                                                           DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BETA FAMILY
                                                                                                                                                    , MEYER M., CETIN RAIDA M., ADERMAN A., UGUCCIONI M.,
           0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 92;
                                                           BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFLUX.
           SCHULZ - KNAPPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HEPARIN-BINDING
                                                                                                                                                                   ADERMANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EOSINOPHILS,
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Best Local S
Matches
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Best Local
                                                                                                                                                                                                                                                                                                                         Matches
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EMBL; Z49270; G1004269; -.

EMBL; Z70292; E233856; -.

EMBL; Z49269; G1004267; -.

MIM; 601392; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCC3_HUMAN STANDARD; PRT; 109 AA.
013954;
01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
CHEMOKINE CC-3 PRECURSOR (HCC-3).
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBMITTED (OCT-1995) TO EMBL/GENBANK/DDBJ DATA BANKS.

-!- FUNCTION: HAS WEAK ACTIVITIES ON HUMAN MONOCYTES AND ACTS VIA
RECEPTORS THAT ALSO RECOGNIZE MIP-1 ALPHA. IT INDUCED
INTRACELLULAR CA2+ CHANGES AND ENZYME RELEASE, BUT NO CHEMOTAXIS,
AT CONCENTRATIONS OF 100-1,000 NM, AND MAS INACTIVE ON T
LYMPHOCYTES, NEUTROPHILS, AND EOSINOPHIL LEUKOCYTES. ENHANCES THE
PROLIFERATION OF CD34 MYELOID PROGENITOR CELLS.

-!- TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL
TISSUES: SPLEEN, LIVER, SKELETAL AND HEART MUSCLE, GUT, AND BONE
MARROW, PRESSENT AT HIGH CONCENTRATIONS (1-80 NM) IN PLASMA.

-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DISULFID DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PARDIGOL A., MAEGERT H.-J., SCHULZ-KNAPPE P.; SUBMITTED (MAY-1996) TO EMBI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL
   P80343;
01-FEB-1995
                                                               MCPB_BOVIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CYTOKINE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CYTOKINE; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE; PS00472; SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ISSUE-LIVER;
                                                                                                                                                                                                                                                         90 VCTNPSDKWVQ 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        74 VCTNPSDKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
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                                                                                                                                                                                                    N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIMILARITY: BELONGS TO THE
                                                                                                                                                                                          ICADPSQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ICADPSQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -C) (CHEMOKINE CC).

z70293; E233858; -.

TE; PS00472; SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                          1
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51
52
109
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(REL.
                                                                                                                                                                                                                                                                                                                     79.8%;
llarity 63.6%;
Conservative
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36
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                                                                  STANDARD;
   31, CREATED)
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109
75
91
12297
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93
59
75
10678
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       MW;
                                                                                                                                                                                                                                                                                                               Score 75; DB 1; Leny.
Pred. No. 1.03e-04;
Pred. No. 1.03e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL.
CHEMOKINE CC-3.
BY SIMILARITY.
BY SIMILARITY.
A; 9AE90F93 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZUCHT H.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 75; DB 1; I
Pred. No. 1.03e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHEMOKINE CC-1.
BY SIMILARITY.
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                               74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FORSSMANN W. -G.,
                                                                  A
                                                                                                                                                                                                                                                                                                                                                                                     Length 109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
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                                                                                                                                                                                                                                                                                                                  Gaps
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                             SISD_MOUSE STANDARD; PRT; 91 AA. P30882; 91.0UL-1993 (REL. 26, CREATED) 01-JUN-1993 (REL. 29, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE) T-CELL SPECIFIC RANTES PROTEIN PRECURSOR (SIS-DELTA) (SMALL INDUCIBLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NON_TER
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROOST P., WUYTS A., LENAERTS J.-P., VAN DAMME J.;
BIOCHEMISTRY 33:13406-13412(1994).

-I- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. ALSO INDUCES THE RELEASE OF GELATINASE B. THIS PROTEIN CAN BIND HEPARIN.

-I- PIM: THE N-TERMINAL IS BLOCKED.

-I- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).

PROSITE: PS00472; SMALL_CYTOKINES_CC: 1.
                                                                                                                         MEDIANE: 94132613.

MEDIANE: T.M., LALLEY P.A., CHANG Y.S.,

DANOEF T.M., LALLEY P.A., CHANG Y.S.,
                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE; 92277990.
HEEGER P., WOLF G., MEYERS C.,
KRENSKY A.M., NEILSON E.G.;
                                                                                                                                                                                                                                                                                                                                                                                                       SCYA5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1B (MCP-1B) (FRAGMENT).
BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                   MEDLINE; 94217689.
SHIN H.S., DRYSDALE B.E.,
PAZNEKAS W.A.;
                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE; 92289805.
SCHALL T.J., SIMPSON N.J., MAK J.Y.;
EUR. J. IMMUNOL. 22:1477-1481(1992).
NOL. CELL. BIÓL. 14:2914-2925(1994).
-I- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES,
-CELLS AND EOSINOPHILS. CAUSES THE RELEASE OF H
BASOPHILS AND ACTIVATES EOSINOPHILS.
                                                                                          SEQUENCE FROM N.A.
STRAIN-BALB/C;
                                                                                                                                                                           STRAIN-NIH
                                                                                                                                                                                                                                                                                                                                                                           MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; C
                                                                                                                                                                                                                                                                                                                                                                                                                     CYTOKINE A5)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CYTOKINE; CHEMOTAXIS; HEPARIN-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-KIDNEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                 KIDNEY INT. 41:220-225(1992).
                                                                                                                                                                                                                                                                                                                                                                  EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE; 95034774.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                48 EICAEPKXXWVQ 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EICADPSQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               74 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10
                                                                                                                                                                                                                                                                                                                                                                                                                     (MURANTES).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8360 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       78.78;
66.78;
                                                                                                                                                                                                                                                                                                                                                                            CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               50
                                                                 SHIN M.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 74; DB 1; I
Pred. No. 1.75e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY.
BY SIMILARITY.
66172F08 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1;
                                                                                                                                                                                                                                                                                                            SUN M.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                 NOBLE P.W.,
                                                                                                                                               HEEGER P.S.,
                                                                                                                                                                                                                                                                                                             O'FARRELL S.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 74;
             HISTAMINE
                                                                   FISHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                           MEMORY T HELPER
                                                                                                                                                 NEILSON E.G.;
                                                                   S.N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
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MORI S.,
INT. IMMUNOL.
INT. IMMUNOL.
(PROTION: MONO...
(BY SIMILARITY).
(C) -!- SUBUNIT: HOMODIMER (BY SI...
CC) (CHEMOKINE CC).
CC -!- SIMILARITY: BELONGS TO THE INTL...
CCC -!- SIMILARITY: BELONGS TO THE INTL...
CCC -!- SIMILARITY: REPONGE TO THE INTL...
CCC -!- SIMILARITY: BELONGS TO THE INTL...
CCC -!- SIMILARITY: BELONGS TO THE INTL...
CCC -!- SIMILARITY: BY SIMILARITY: BY SIMILARITY:
TOWAL 1 23 BY SIMILARITY:
TOWAL 58 BY SIMILARITY:
TOWAL 59 BY SIMILARITY:
TOWAL 1 24 BY SIMILARITY:
TOWAL 1 25 BY SIMIL
RESULT 30
ID SISD_RAT
AC P50231;
DT 01-OCT-1996 (
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AC PA
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MI1B_RABIT P46632; 01-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CONFLICT
CONFLICT
SEQUENCE
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-:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC).
(CHEMPOKINE CC).
EMBL; M77747; G200650; -.
EMBL; 337648; G250208; -.
EMBL; U02298; G460091; -.
EMBL; V70675; G475206; -.
EMBL; X70675; G475206; -.
EMBL; X70675; G475206; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-NEW ZEALAND WHITE;
STRAIN-NEW ZEALAND WHITE;
MEDLINE; 94198229.

MORI S., GOTO K., GOTO F., MUTAKAMI K., OHKAWARA S.,
INT. IMMUNOL. 6:149-156(1994).

-!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA PRECURSOR (MIP-1-BETA) (IMMUNE ACTIVATION PROTEIN 2) (ACT-2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DISULFID DISULFID
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CHAIN
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
EUTHERIA; LAGOMORPHA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MGD; MGI:98262; SCYA5.
PROSITE; PS00472; SMAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
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nes 7; Conser
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1 23 F
24 91 F
24 91 F
33 57 B
34 73 B
19 19 T
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      (REL. 34, CREATED)
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                                                                       STANDARD;
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58.3%;
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Pred. No. 1.75e-04;
3; Mismatches 2
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T-CELL SPECIFIC RANTES
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Best Local Similarity 58.3%;
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JONES M.L., SHANLEY T.P., WARD P.A.;
JONES M.L., SHANLEY T.P., WARD P.A.;
SUBMITTED (FEB-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.

-!- FUNCTION: CHEMOATTRACTANT FOR BLOOD MONOCYTES, MEMORY T HELPER
CELLS AND EOSINOPHILS. CANGES THE RELEASE OF HISTAMINE FROM
BASOPHILS AND ACTIVATES EOSINOPHILS (BY SIMILARITY).

-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
T-CELL SPECIFIC RANTES PROTEIN PRECURSOR (SIS-DELTA) (SMALL INDUCIBLE CYTOKINE A5).
                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                      SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                  RATTUS NORVEGICUS () EUKARYOTA; METAZOA;
                                                                                                                                                                                                            CHAIN
                                                                                                                                                                                                                                      CYTOKINE;
                                                                                                                                                                                                                                                     PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                        EUTHERIA; RODENTIA.
                                                                 72 QVCANPEKKWVQ 83
                                                     1 EICADPSQKWVQ
                                                                                                                                                                                                                                                               -C) (CHEMOKINE CC)
U06436; G459152;
                                                                                                                                                                                                                                     PS00472; SMALL_CYTOKINES_CC; 1.
CHEMOTAXIS; T-CELL; SIGNAL; INFLAMMATORY RESPONSE.
                                                                                                                                                                 92 AA;
                                                                                                                                                                             3545
                                                                                                           Conservative
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A; CHORDATA;
                                                     12
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             07:36:30 1999
                                                                                                         Score 74; DB 1; I
Pred. No. 1.75e-04;
3; Mismatches 2
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BY SIMILARITY.
9F897698 CRC3:
                                                                                                                                                                                                          T-CELL SPECIFIC
                                                                                                                                                                                                                         POTENTIAL.
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                                                                                                                                                                 CRC32;
                                                                                                                                                                                                          RANTES PROTEIN
                                                                                                                                   Length 92;
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1 77 81.9 80 4 014745 2 73 77.7 81.9 80 4 014745 2 73 77.7 97 13 057411 LYMPHOTACTIN PRECURSOR 1.51e-03 3 73 77.7 395 11 035188 NEUROTACTIN	o. is the number of results pre reater than or equal to the sco derived by analysis of the tota SUMMARIES  Query Match Length DB ID	sptrembl8 1:sp_arches 5:sp_invert 9:sp_bhage 13:sp_verts Mean 25:153;	ion: ( Score: 9 : 1 table: G : 1 : 1 ccssing: M	Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd  MPsrch_pp protein - protein database search, using Smith-Waterman algorithm Run on: Thu Apr 1 07:36:48 1999; MasPar time 4.96 Seconds Tabular output not generated.	
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054898 028733 011466 0474671 0474671 0475847 045847 0474739 066151 077102 071103 077102 011123 077102 011123 077304 063529 0746595 0746595 0746595 0746595 074595 074595 074595 074595 074595 074595	2719 1622 3747 2610 2610 4062 4062 8525 8761 8523 6152	3582 3582 3582 3582 3686 8409			7634 8423 3912 0460 0460 5737 5737 5736 7013 8157 1100 9126
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GALLUS GALLUS (CHICKEN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ARCHOSAURIA; AVES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                  ROSSI D.L., BAZAN J.F., ZLOTNIK A.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBMITTED (AUG-1995) TO EMBL/GENBANK/DDBJ DATA BANKS EMBL; D63785; G961440; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ISHIZUKA K., IGATA-YI R., NARUSE KATSURAGI S., KIN Y., OHMOTO Y., MIYAKAWA T.;
                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                 CHAIN
                                                                                                                                                                                                                                                                                                                     SIGNAL
                                                                                                                                                                                                                                                                                                                                                             SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AF006742; G2827882;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-SPLEEN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NEOGNATHAE; GALLIFORMES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PFAM; PF00048; il8; 1.
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TISSUE=BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                        Local Similarity
            72
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::|||||: |||
1 EICADPSQKWVQ
        ICVHPEQKWVQ 82
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9 AA;
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llarity 66.7%;
Conservative
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25
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852
                                                                                                                        77.78;
72.78;
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                                                                                                                                                                                                                                             W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PHASIANIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         041564
093091
Q93290
P90865
Q19931
Q71888
041885
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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                                                                                                                        Score 73; DB 13;
Pred. No. 1.31e-03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 77; DB 4; I
Pred. No. 1.68e-04;
3; Mismatches 1
                                                                                    0;
                                                                                                                                                                                                                                     LYMPHOTACTIN.
3290101C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3F87F1C6 CRC32;
                                                                                                                                                                                                                                                                                                                 POTENTIAL.
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LD78 ALPHA BETA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
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NOMIYAMA H., ]
                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ENVELOPE GLYCOPROTEIN.
ENVELOPE GLYCOPROTEIN.
HYPOTHETICAL PROTEIN C
T2488.7 PROTEIN.
COSMID F31D5.
PATIENT 3799(9-93), CL
ENVELOPE GLYCOPROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PHASIANINAE; GALLUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97
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                                                                                                                                                        Length 97;
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                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
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5.48e+01
5.48e+01
5.48e+01
5.48e+01
8.20e+01
8.20e+01
                                                                                Gaps
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RESULT
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DT 01
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Best Local S
Matches
Q98158 PREI
Q98158; 012569;
Q1-FEB-1997 (TRE
01-JUL-1997 (TRE
01-NOV-1998 (TRE
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O35188;
O1-JAN-1998
O1-JAN-1998
O1-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  035933;
035933;
01-JAN-1998
01-JAN-1998
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EUKARYOTA; M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZLOTNIK A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ROSSI D., HARDIMAN G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SCIUROGNATHI; MURIDAE;
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7 (TREMBLREL.
7 (TREMBLREL.
8 (TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BAZAN J.F.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRELIMINARY;
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Query Match 77.7%;
Best Local Similarity 72.7%;
Matches 8; Conservative
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EMBL; AF010586; G2317698; -
MGD; MGI:1097153; SCXD1.
PFAM; PF00048; 118; 1.
SEQUENCE 395 AA; 42098 M
                                                                                                                                                                                                                                                                                                                                                                                   01-NOY-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
FRACTALKINE.
MUS GUUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.

MEDLINE; 97320499.

PAN Y., CLARE L., HONG Z., DOLICH S., D

GOSSELIN M., MA J., DUSSAULT B., WOOLF

GUTIERREZ-RAMOS J.C., GEARING D.;

GUTIERREZ-RAMOS J.C., GEARING D.;
                                                                                                                                                                                                                                             SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA EMBL; U92565; G2459677; --
PFAM; PF00048; 118; 1.
SEQUENCE 395 AA; 42040 MW; 3997A113 CRC32;
                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
STRAIN-BALB/C; TISSUE-BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Neurotactin, a membrane-anchored chemokine upregulated in brain inflammation.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US (MOUSE).
METAZOA; CHORDATA; VERTEBRATA;
ייייסייחבר: MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (TREMBLREL.) (TREMBLREL.
                                                                                                                                                                                     77.7%;
llarity 72.7%;
Conservative
                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                           COPELAND
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Pred. No. 1.31e-03;
2; Mismatches 1
CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                   Score 73; DB 11;
Pred. No. 1.31e-03;
2; Mismatches 1
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F B., ALPERIN A., C
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                                                                                                                                                                                                                 Length 395;
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                                                                                                                                                                                                                                                                                             BANKS
                                                                                                                                                                                                                                                                                                                           JENKINS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EUTHERIA;
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                                                                                                                                                                                     Gaps
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KESULT 6

ID 088430;

AC 088430;

OT 01-NOV-1998 (TREMBLREL 08, CR. 7)

TO1-NOV-1998 (TREMBLREL 08, LAS. TO1-NOV-1998 (TREMBLREL 08, LAS. TO1-NOV-1998 (TREMBLREL 08, LAS. E. CC CHEMOKINE ABCD-1.

EUKARYOTA; METAZOA; CHORDATA; VERODENTIA; SCIUROGNATH; MIDPTA--

[1]
         RESULT

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Best Local s
Matches
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SEQUENCE FROM N.A.

NICHOLAS J., RUVOLO V.R., B
HENDRICKSON S., GUO H.G., F
SUBMITTED (NOV-1996) TO EMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
SUN R., LIN S.-F., MILLER G.;
SUBMITTED (SEP-1996) TO EMBL/GE
EMBL; U75698; G1718266; -.
EMBL; U74585; G1658273; -.
EMBL; U74585; G2246546; -.
EMBL; U73872; G2246546; -.
EMBL; U71566; G3551763; -.
PFAM; PF00048; 118; 1.
HYPOTHETICAL PROTEIN.
SEQUENCE 95 AA; 10485 MW; 5
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PARRY J.P.,
SUBMITTED (M
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KAPOSI'S SARCOMA-ASSOCIATED HERPESVIRUS.
VIRUSES, DSDNA VIRUSES, NO RNA STAGE; HE
GAMMAHERPESVIRINAE; RHADINOVIRUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NEIPEL F., ALBRECHT J.C., FLECKENSTEIN B.;
"Cell-homologous genes in the Kaposi's sarcoma-associated human herpesvirus 8: determinants of its pathogenicity?";
J. VIROL. 71:4187-4192(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RUSSO J.J., BOHENZKY R.A., PARRY J.P., PERUZZI D., ED SUBMITTED (OCT-1996) TO EM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            genes by KSHV.";
SCIENCE 274:1739-1744(1996).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                   QICADPSKNWVR
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EICADPSQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BOHENZKY R.A., CHIEN M.C., CHEN J., YAN N
PERUZZI D., EDELMAN I.S., CHANG Y., MOORI
MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
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                                                                                                                                                                                                                                                                                                                                                                                           76.6%;
larity 66.7%;
Conservative
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                              RDATA; VERTEBRATA; MURIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ., BURNS W.H., SANDFORD G., WA
., HAYWARD G.S., REITZ M.S.;
EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL/GENBANK/DDBJ DATA BANKS
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                                                                                                                   CREATED)
LAST SEQUENCE UF
LAST ANNOTATION
                                                                                                                                                                                                                                                                                                                                                                                           Score 72; DB 14; Lv
Pred. No. 2.18e-03;
3; Mismatches 1;
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                                                                                                                   ON UPDATE)
                              MAMMALIA;
MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 95;
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MOORE P.
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MOORE P.
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                                                   EUTHERIA;
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.S.;
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O15467;
O1-748-1998 (TREMBLREL 05, C
O1-JAN-1998 (TREMBLREL 05, I
O1-NOV-1998 (TREMBLREL 08, I
IL-10-INDUCIBLE CHEMOKINE
                                                                                                                                                                                                                                                                                                                                                       YOUN B.S., HANGOC G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HOMO SAPIENS (HUMAN).

EUKARYOTA; METAKOA; CHORDATA;

EUKARYOTA; METAKOA; HOMO.
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TISSUS-LIVER;
MEDLINE; 9835351.
SCHANIEL C., PARDALI E., SALLUSTO F., SPELETAS M.,
SHIMIZU T., SEIDL T., ANDERSSON J., MELCHERS F., R
SIDERAS P.;
                                                                                                                                                                     PFAM; F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE-LIVER; SHOUDAI K., HIESHIMA K. YOSHIE O., NOMIYAMA H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CC chemokine which acts selectively J. EXP. MED. 188:451-463(1998). EMBL; AF052505; G3378116; -.
                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                           EMBL;
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SUBMITTED (
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                                                                                                                                                                                                                                                                                                                                      HANGOC G., KWON B.S.; Isolation and characterization
                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE; 98308096.
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                                                                                                                                                                                THEM. BIOPHYS. RES. COMMUN.

1; U91746; GZ581781; -...

1; AB007454; D1024963; -...

1; AF088219; G3719365; -...

1; AF055467; G3395776; -...

M; PF00048; 118; 1.
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 EICADPSQKWVQ
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                                                                                           Similarity
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(AUG-1998) TO
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larity 72.7%;
Conservative
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, HELMS A., G
                                                                         Conservative
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                                                                                                                                                                                                                                                                                 COMMUN.
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EMBL/GENBANK/DDBJ I
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                                                                                                                                                   W.
                                                                       Score 70; DI
Pred. No. 5.:
5; Mismatcl
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                                                                                                                                                                                                                                                                                                                  n of LMC, a not
CC chemokine,
                                                                                                                                                                                                                                                                                                                                                                         H.E.,
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ed. No. 5.93e-03;
Mismatches 2;
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5.93e-03
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                                                                                                          Length 120;
                                                                                                                                                                                                                                                                                                                                                                           FRASER
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Best Local Similarity 50.0%;
Conservative
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Best Local
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043646
043646; PRELIMINARY;
01-JUN-1998 (TREMBLREL 0
01-JUN-1998 (TREMBLREL 0
01-NOV-1998 (TREMBLREL 0
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000175
000175;
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089093;
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01-NOV-1998
CC CHEMOKINE
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EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENTZ R., GAROTTA G.;

J. EXP., MED. 0:0-0(0).

EMBL; U85768; G1916252; -.

PFAM; PF00048; il8; 1.

SEQUENCE 119 AA; 13119 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Structure of a region of 181 kb containing five CC (
SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS
EMBL; AF043441; G2905632; -.
EMBL; AF048219; G3719366; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUBMITTED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. JANG J.S., KIM B.E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RANTES PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PATEL V.P., KREIDER B.L.,
NARDELLI B., PIPPALLA V.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NOMIYAMA H.;
                                                                                                                                                                                                                                                                                                   71 QVCANPEKKWVR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          72 QFCGDPKQEWVQ :::|:|| | | | | |
     CHEMOKINE
                                                                                                                                                                                                                                              \vdash
                                                                                                                                                                                                                                              EICADPSQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EICADPSQKWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73.4%;
Similarity 58.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PS00472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (JAN-1998)
8 (TREMBLREL. 08,
3 (TREMBLREL. 08,
3 (TREMBLREL. 08,
VE ST38 PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                91
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                                                                                                                                                                                                                                                                                                                                                                                                                                               1
24
`AA;
                                                                                                                                      PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                   82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          23
91
9990 MW;
                                                                                                                                                                                                                                                                                                                                                                            72.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06, CREATED)
06, LAST SEQU
08, LAST ANNO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENTZ,
                         LAST SEQUENCE LAST ANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 69;
Pred. No. 9
3; Mismat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                            Score 68; DB 4; 1
Pred. No. 1.60e-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                          RANTES.
CF404FAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERTEBRATA;
                                                                                                                                      PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDF526F0 CRC32;
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                            ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                     SEQUENCE UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    H., LEUNG
THOTAKURA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CRC32;
                                                                                                                                      97
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .74e-03
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                                                                                                                                   Å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 119;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                     Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            T.,
                                                                                                                                                                                                                                                                                                                                                  0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            genes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIMATES;
                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                  0,
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ID ON SEQUENCE RA HEDRICK RT "Identic RT Contain RT Con
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   Query Match
Best Local S
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 72.3%;
Best Local Similarity 70.0%;
Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               000585;
01-JUL-1997 (TREMBLREL. 04, CRE.
01-JUL-1997 (TREMBLREL. 04, LAS.
01-NOV-1998 (TREMBLREL. 08, LAS.
BETA CHEMOKINE EXODUS-2.
HOMO SAPIENS (HUMAN).
EUKARYOTA, METAZOA; CHORDATA; V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHAIN
SEQUENCE
                                                                                                                                                             SEQUENCE FROM N.A.

NAGIRA M., IMAI T., HIESHIMA K., KUSUDA J., RIDANPAA NISHIMURA M., KAKIZAKI M., NOMIYAMA H., YOSHIE O.; SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; 088320; G2106920; -.

EMBL; AF001979; G2624925; -.

EMBL; AF001979; G2624925; -.

EMBL; AF001409; D1022673; -.

EFFAM, PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MEDLINE: 97400322.
HEDDRIK J.A., ZLOTNIK A.;
"Identification and characterization containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VILLARES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUBMITTED (JUL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; AF053313; G3551819; -. EMBL; AJ007862; E1312757; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. UTANS-SCHNEITZ U.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
HEDRICK J.A., ZLOTNIK
SUBMITTED (MAY-1997) 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. HROMAS R.A., GRAY P., SUBMITTED (JUN-1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "A novel rat CC chemokine, id display, is upregulated in br J. NEUROIMMUNOL. 0:0-0(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ESSLAUER W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      74 VCADPKQNWV 83
:|||| |:||
2 ICADPSQKWV 11
                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97
                                                                                                                                        134 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1
28
AA;
72.3%;
larity 66.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27
97
10826
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                                                                                                                                 1.
14646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ( A.;
TO EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KLEMSZ M., FIFE K.,
TO EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04, CREATED)
04, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MW;
                                                                                                                                    MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       identified by targeted
brain inflammation.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 68; DB 11;
Pred. No. 1.60e-02;
2; Mismatches 1
Score 68; DB 4; Le
Pred. No. 1.60e-02;
2; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            POTENTIAL.
CC CHEMOKINE ST38
053405BD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KLINKERT W.E.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERTEBRATA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                    FE86A239 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of a
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DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MAMMALIA;
MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    novel beta chemokine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          UPDATE)
                                                                  Length 134;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DA SILVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BANKS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          differential
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUTHERIA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
   Gaps
   0;
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ELCADPKELWVQ

EICADPSQKWVQ

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FERRENCE FOR SOLUTION OF THE S
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Best Local S
Matches
                                                                                                                                                           Query Match
Best Local
                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      O09002 PRELIMINARY;
O09002;
O1-JUL-1997 (TREMBLREL. 04
O1-JUL-1997 (TREMBLREL. 04
O1-NOV-1998 (TREMBLREL. 08
SMALL INDUCIBLE CYTOKINE A
SCYACI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JLI 12
062812
062812;
01-AUG-1998
01-AUG-1998
01-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.

TISSUB-THYMUS;

TANABE S., LU Z., LUO Y., QUACKENBUSH E.J., BERMAN M.A.,
COLLINS-RACIE L.A., MI S., REILLY C., LO D., JACOBS K.A.,
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                               HEDRICK J.A., ZLOTNIK A.,
SUBMITTED (MAY-1997) TO SUBMITTED (MAY-1997) TO SUBMITTED (MAY-1997) TO SUBMITTED (MAY-1997) TO SUBMITTED (MAY-1997) G.Z.09189; -.
EMBL, AF001980; G.2624927; -.
EMBL; AF001987677; S.C.YA21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HEDRICK J.A., ZLOTNIK A.;
"Identification and characterization of a novel beta chemokine containing six conserved cysteines.";
CONTAINING SIX CONSERVED (1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EQUUS CABALLUS (HORSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
PERISSODACTYLA; EQUIDAE; EQUUS.
                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SCIUROGNATHI; MURIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MUS MUSCULUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; AF062377; G3126973; -. NON_TER 97 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBMITTED (APR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FRANCHINI M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE-BRONCHOALVEOLAR TISSUE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-AUG-1998 (TREMBLREL. 0
01-AUG-1998 (TREMBLREL. 0
INTERLEUKIN-8 (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                              Local Similarity
                                                              73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              75 EVCLNPHTKWVQ
      \vdash
                                    ELCANPEEGWVQ
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   EICADPSQKWVQ
                                                                                                                                                                                                                                                           PF00048; 118;
NCE 133 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             h 71.3%;
Similarity 58.3%;
7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97400322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US (MOUSE).
METAZOA; CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97 AA; 10742 MW;
                                                                                                                             70.2%;
llarity 58.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (TREMBLREL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12
                                                              84
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                                                                                                                                                                                                                                14558 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
04,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A21
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Pred.
2; M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
1 (TCA4).
                                                                                                                          Score 66; DB 11;
Pred. No. 4.23e-02;
3; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
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                                                                                                                                                                                                                                                           C0532523 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SDW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   e 67; DB 6; Leng
... NO. 2.60e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     133 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
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                                                                                                                                                                                                                                                                                                                                                                                                                   DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                        Length 133
                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DORF
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                                                                                                                             Gaps
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Best Local S
Matches
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Best Local S
Matches
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009006 PRELIMINARY;
009006;
01-JUL-1997 (TREMBLREL 04, C
01-JUG-1998 (TREMBLREL 07, L
01-NOV-1998 (TREMBLREL 08, L
BETA CHEMOKINE EXODUS-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ULT 15
Q99664;
Q19664;
Q1-MAY-1997 (TREMBLREL 0
01-MAY-1997 (TREMBLREL 0
01-NOV-1998 (TREMBLREL 0
                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
TISSUE-PANCREAS;
MEDLINE; 97275143
HROMAS R., GRAY P.W., C
BELL G.I., TAKEDA J., A
                                                                                                                           PFAM; PFO
                                                                                                                                                                "Cloning and characterization BLOOD 89:3315-3322(1997).
EMBL; U64197; G1778717; -...
PROSITE; PS00472; SMALL_CYTOK1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U88322; G3169697; -.
MGD; MGI:1097677; SCYA21.
PFAM; PF00048; 118; 1.
SEQUENCE 133 AA; 14600 MW; B34A5E22 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                         HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 974444139.

HROMAS R., KIM C.H., KLEMSZ M., KRATHWOHL M., SCHNIZLEIN-BICK C., BROXMEYER H.E.;

"Isolation and characterization of Exodus-2, a "Isolation and characterization of Exodus-2, a with a unique 37-amino acid carboxyl-terminal trumwnow 150.7564.7565.01007.
                                                                                                                                                                                                                                                                                                                                                                                                     CATARRHINI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHEMOKINE EXODUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE-TOTAL FETUS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A
                                                                                                                                                                                                                                                        KLEMSZ M.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HROMAS R.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EQUENCE FROM N.A. ISSUE-TOTAL FETUS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73
72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IMMUNOL.
VCANPKQTWV 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EICADPSQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ELCANPEEGWVQ 84
                                                                                                                           PF00048; il
                                       h 68.1%;
Similarity 60.0%;
6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              159:2554-2558(1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 70.2%;
llarity 58.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                       HOMINIDAE;
                                                                                                                                                 118;
                                                                                                                                                                  SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14600 MW;
                                                                                                                             10691 MW;
                                                                                                                                                                                                                                                                            CHANTRY
                                                                                                                                                                                                                                                                                                                                                                                                         HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         800
                                       Score 64; DB 4; Le
Pred. No. 1.10e-01;
2; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CREATED)
LAST SEQUENCE UI
LAST ANNOTATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 66; DB 11; L
Pred. No. 4.23e-02;
3; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                          s.,
                                                                                                                                                                                                                                  of.
                                                                                                                                                                                                                                                                                                                                                                                                                           VERTEBRATA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                             1526B4C0
                                                                                                                                                                                                                                  exodus,
                                                                                                                                                                                                                                                                          GORDON M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                133
                                                                                                                                                                     ۳.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               95
                                                                                                                             CRC32;
                                                                                                                                                                                                                                  a novel beta-chemokine.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ON UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ø
                                                                                                                                                                                                                                                                            KRATHWOHL
COOPER S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    extension.
                                                                               Length 95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FIFE K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 133;
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                                            Indels
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                                                                                                                                                                                                                                                                          M., FIFE K.,
BROXMEYER H.E.,
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RESULT 16

ID 997884;
AC 997884;
AC P97884;
AC P97884;
DT 01-MAY-1997 (TREMBLEEL. 0:
DT 01-MAY-1998 (TREMBLEEL. 0:
DT 01-MOV-1998 (TREMBLEEL. 0:
DT 01-MOV-1998 (TREMBLEEL. 0:
DE CC CHEMOKINE EXODUS.
OS RATTUS NORVEGICUS (KAT).
OC EUMARKOTA, METAZOA; CCHORD)
OC SCIUROGNATHI; MURIDAE; MUI
RN (1)
RP SEQUENCE FROM N.A.
RC STRAIN-SPRAGUE-DAWLEY;
RA KELNER G.S., MACIEJENSKI-1
RL SUBMITTED (FEB-1997) TO EI
RN (2)
RO SEQUENCE FROM N.A.
TA NOVEL TAT CC Chemokine
MI USPLAY, is upregulated in
MI NEUROIMMUNOL. 0:0-0(199
DR EMBL; U90447; G1899246;
DR EMBL; U90447; G1899246;
DR EMBL; G905312; G3551817;
DR EMBL; AF053312; G3551817;
DR SEQUENCE 96 AA; 10875 }
SEQUENCE 96 AA; 10875 }
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ID OC
AC OC
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Best Local S
Matches
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Best Local Similarity
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JLT 18
000626
000626;
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055038;
01-JUN-1998;
01-JUN-1998;
01-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUN-1998 (TREMBLREL 06, 01-JUN-1998 (TREMBLREL 08, 101-NOV-1998 (TREMBLREL 08, 18 LYMPHOCYTE CHEMOATTRACTANT MUS MUSCULUS (MOUSE)
                                                                                                                                                                                                                                                                                                                                                            GUNN M.D., NGO V.N., ANSEL K.M., WILLIAMS L.T.;
"A B-cell-homing chemokine made i Burkitt's lymphoma receptor-1.";
NATURE 391:799-803(1998).
EMBL; AF044196; G2911374; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
STRAIN-FISHER 344; TISSUE-BRAIN;
UTANS-SCHNEITZ U., LOREZ H., KLINKERT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
STRAIN=SPRAGUE-DAWLEY;
KELNER G.S., MACIEJENSKI-LENOIR D., LEE E.D., MAKI R.A.;
SUBMITTED (FEB-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RATTUS NORVEGICUS (RAT).
EUKARYOTA; METAZOA; CHORDATA; VI
SCIUROGNATHI; MURIDAE; MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 98146056.
GUNN M.D., NGO V.N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA; METAZOA; CH
SCIUROGNATHI; MURIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN=C57BL/6J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "A novel rat CC chemokine, identified by targeted differential uisplay, is upregulated in brain inflammation.";
J. NEUROIMMUNOL. 0:0-0(1998).
EMBL; U90447; G1899246; -.
                                                                                                                                                                                  74
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                                                                                                                                  N
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                                                                                                                                  ICADPSQKWVQ
                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                         109 AA;
                             PRELIMINARY;
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                                                                                                                                  12
                                                                                                                                                                               84
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54.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MURINAE;
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
T BLC.
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                  Score 62; DB 11;
Pred. No. 2.84e-01;
2; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 64; DB 11;
Pred. No. 1.10e-01;
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E; RATTUS.
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E; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3FC09DD8 CRC32;
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                             PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
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                                                                                                                                                                                                                                                                                    Length 109;
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RESULT 19
ID 093238;
AC 093238;
DT 01-NOV-1998 (TREMBLREL 08, CREAT DT 01-NOV-1998 (TREMBLREL 08, LAST DT 01-NOV-1998 (TREMBLREL 08, LAST DT 01-NOV-1998 (TREMBLREL 08, LAST DE CC CHEMOKINE-1.

OS CYPRINUS CARPIO (COMMON CARP).
CC EUKARYOTA; METAZOA; CHORDATA; VEH CEUKARYOTA; EUTELEOSTEI; CUTRELOSTEI; CYPRINUS RN [1]
RP SCOUENCE FROM N.A.
RA FUJIKI K., NAKAO M., SHIN D., YAI RA FUJIKI K., NAKAO M., SHIN D., YAI PUJIKI A., NAKAO M., SHIN D., YAI PUJIKI K., NAKAO M., SHIN D., YAI PUJIKI K., NAKAO M., SHIN D., YAI PUJIKI K., NAKAO M., SHIN D., YAI PUJIKI A., NAKAO M., NAKAO M., NAKAO M., NAKAO M., NAKAO M., NAKAO M
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Best Local
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Best Local
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SEQUENCE
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SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J., BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.; "Homo sapiens Chromosome 16 BAC Clone C11987SK A-15ZE5."; SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; 083171; G1911581; -.. EMBL; U83171; G1921581; -.. EMBL; U8329; G2052425; -..
                                                                                                                                                                                                                                                                                     SUBMITTED (JAN-1998) TO EMBL/GENBANK/DDBJ DATA EMBL; AB010469; D1032417; -. SEQUENCE 101 AA; 11266 MW; 9CFBD540 CRC32;
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MENG T., BOONE T., ANDREW D.P.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUL-1997 (TREMBLREL.
01-JUL-1997 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                              FUJIKI K., NAKAO M., SHIN D., YANO T.; "CDNA cloning of a carp CC chemokine h
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIGNAL
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EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MACROPHAGE-DERIVED CHEMOKINE MDC OR A-152E5.1.
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                                                                         72 EFCSDPKLRWV 82
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NTOVANI A., GRAY P.W.,
EXP. MED. 185:0-0(0).
       EICADPSQKWV
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                                                                                                                                            6,
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25
93 AA;
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llarity 54.5%;
Conservative
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llarity 72.7%;
Conservative
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04, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
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                                                                                                                                        Score 61; DI
Pred. No. 4.5
3; Mismatch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CREATED)
LAST SEQUENCE UPDATE)
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Pred. No. 4.52e-01;
0; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                POTENTIAL.
MACROPHAGE-DERIVED CHEMOKINE
65EA63D2 CRC32;
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                                                                                                                                                Mismatches
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4.52e-01;
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RESULT 20 ID 046178

PRELIMINARY;

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RESULT
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Best Local Similarity

Matches 6; Conser
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Best Local Similarity
Matches 5; Conser
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O1-JUN-1998 (TREMBLREL. O6, LAST SEQUENCE...)
O1-JUN-1998 (TREMBLREL. O6, LAST SEQUENCE...)
O1-NOV-1998 (TREMBLREL. O8, LAST ANNOTATION UPDATE)
RADIAL SPOKEHEAD.
STRONGYLOCENTROTUS PURPURATUS (PURPLE SEA URCHIN).
STRONGYLOCENTROTUS, ECHINOZOA; ECHINOZOA; ECHINOZOA; EUECHINOIDEA; EUECHINOIDEA; STRONGYLOCENTROTUS.
                                                        P78423; 000672;
01-MAY-1997 (TREMBLREL. 03
01-MAY-1997 (TREMBLREL. 03
01-NOV-1998 (TREMBLREL. 08
CX3C CHEMOKINE PRECURSOR.
A-152E5.2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      067634:
01-NOV-1996 (TREMBLREL. 0
01-NOV-1996 (TREMBLREL. 0
01-NOV-1998 (TREMBLREL. 0
ECO Q PROTEIN (FRAGMENT).
                                                                                                                                                                                                                             LT 22
P78423
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Q67634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  with MDV.";
VIROLOGY 213:590-599(1995).
EMBL; U34966; G1185444; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Isolation and characterization of mapping to the BamHI-I2, BamHI-Q2, genome from lymphoblastoid cells t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GALLID HERPESVIRUS TYPE VIRUSES; DSDNA VIRUSES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-GA;
MEDLINE; 96074534.
  EUKARYOTA; METAZOA;
                                HOMO SAPIENS (HUMAN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PFAM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SHIRAZI Y.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PENG Q., ZENG M., BHUIYAN Z.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ALPHAHERPESVIRINAE;
                                                                                                                                                                                                                                                                                                                                                                                                   145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        270 VCNEPGQPWV
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                                                                                                                                                                                                                                                                                                                                           ICADPSQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                VCVDPEAPWVQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PF00048; i18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         203
                                                                                                                                                                                                                                                                                                                                                                                                                                                        62.8%;
larity 54.5%;
Conservative
                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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50.0%;
CHORDATA;
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VARICELLOVIRUS.
                                                                                                             80,0
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Pred.
3; M
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 59; DB 14;
Pred. No. 1.13e+00;
1; Mismatches 4
                                                                                                             LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         887D04C3 CRC32
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22, and BamHI-L fragments
s transformed and persista
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            UBUKATA E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               re 61; DB 5; L
d. No. 4.52e-01;
Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    203
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the protein i
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in the
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of the MDV
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RESULT 24
ID 070460;
AC 070460;
DT 01-AUG-1998 (TREMBLREL. 0
DT 01-AUG-1998 (TREMBLREL. 0
DT 01-AUG-1998 (TREMBLREL. 0
DT 01-AUG-1998 (TREMBLREL. 0
DE 05-01-1 LIGAND CHEMOKINE. 05-01 CHORD. 05-01 CHOR
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Best Local S
Matches
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Best Local 9
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[1]
SEQUENCE FROM N.A.
MEDLINE; 97177111.
MANUE SOFT MEMBRANE-BOUND Chemokine will nature 385:640-644(1997).
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073912;
073912;
01-AUG-1998
01-AUG-1998
01-AUG-1998
K60 PROTEIN
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SEQUENCE
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ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J.,
BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.;
"Homo sapiens Chromosome 16 BAC clone CIT9875K-A-152E5.";
SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; 091835; G1899259; -.
EMBL; 094487; G1888523; -.
EMBL; 0004382; G3352821; -.
EMBL; AC004382; G3352821; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUBMITTED (AUG-1997) TO EMBL; Y14971; E1295103; SIGNAL 1 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GALLUS GALLUS (CHICKEN).
EUKARYOTA; METAZOA; CHORDATA;
NEOGNATHAE; GALLIFORMES; PHAS:
      EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
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TISSUE=MACROPHAGE LIKE;
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(TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61.7%;
larity 54.5%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62.8%;
larity 60.0%;
Conservative
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42202
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DATA; VERTEBRATA; ARCHOSAURIA; AVI
PHASIANIDAE; PHASIANINAE; GALLUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WW;
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                                                                                                                         CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 58; DB 13;
Pred. No. 1.78e+00;
2; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 59; DB 4; Le
Pred. No. 1.13e+00;
2; Mismatches 2;
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CX3C CHEMOKINE.
; C8093D7D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   POTENTIAL.
K60 PROTEIN.
                                                                                                                                                                                                                                                  PRT;
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                                   MAMMALIA;
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                                   EUTHERIA;
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Best Local
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MEDLINE; 98130629.

LEGLER D.F., LOETSCHER M., STUBER ROBER B.;

BAGGIOLINI M., MOSER B.;

"B cell-attracting chemokine 1, a holymphoid tissues, selectively attraction, EXP. MED. 187:655-660(1998).
                                                                                                     O65737;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              O43927;
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SEQUENCE FROM N. A
SEQUENCE FROM N. A
TISSUE-LYMPHOID;
NGO V.N., TANG H
J. EXP. MED. 0:0
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01-JUN-1998
01-NOV-1998
01-AUG-1998 (TREMBLREL. 07, CREATED)
01-AUG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
BETA-GALACTOSIDASE (EC 3.2.1.23) (LACTASE) (FRAGMENT).
CICER ARIETINUM (CHICKPEA) (GARBANZO).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GUNN M.D., NGO V.N., ANSEL K.M., WILLIAMS L.T.;
"A B-cell-homing chemokine made Burkitt's lymphoma receptor-1.";
NATURE 391:799-803(1998).
                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                     CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAPOLITANO M., SPINETTI G., (
SUBMITTED (OCT-1997) TO EMBL,
EMBL; AJ002211; E1249325; -.
EMBL; AF044197; G2911376; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. MEDLINE; 98146056.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CXC CHEMOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NGO V.N., TANG H.L., CYSTER J.
J. EXP. MED. 0.0-0(1998).
EMBL; AF059208: 63068765; -.
SEQUENCE 108 AA; 11911 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; AF029894; G3169814;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73 QLCAPPDQPWVD :: | | | | | | | |
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50.0%;
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                                                                                                                                                                                                                                                                                                                                                                                   MW;
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                               Score 58; DB 4; I
Pred. No. 1.78e+00;
2; Mismatches 4
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Pred. No. 1.78e+00;
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                     POTENTIAL.
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B lymphocytes v
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via BLR1/CXCR5.";
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Best Local Similarity
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Q97013;
01-FEB-1997 (TREMBLREL. 0:
01-FEB-1997 (TREMBLREL. 0:
01-NOV-1998 (TREMBLREL. 0
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065736;
01-AUG-1998
01-NOV-1998
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01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
BETA-GALACTOSIDASE (EC 3.2.1.23) (LACTASE).
CICCER ARIETINUM (CHICKPEA) (GARBANZO).
CICCER ARIETINUM (CHICKPEA) (GARBANZO).
EUKARYOTA; VIRIDIPLANTAE; CHAROPHYTA/EMBRYOPHYTA GROUP; EMBRYOPHYTA;
TRACHEOPHYTA; EUPHYLLOPHYTES; SPEEMATOPHYTA; MAGNOLIOPHYTA;
EUDICOTYLEDONS; ROSIDAE; FABALES; FABACEAE; PAPILIONOIDEAE; CICER.
           SEQUENCE
MEDLINE;
GAO F., M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NON_TER
                                                                                                                                                                                                                                                                                                                                                        STRAIN-CV. CASTELLANA; TISSUE-ETIOLATED EPICOTYLS; ESTEBAN R., DOPICO B., LABRADOR E.; SUBMITTED (SEP-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- CATALYTIC ACTIVITY: HYDROLYSIS OF TERMINAL, NON-REDUCING GALACTOSE RESIDUES IN BETA-D-GALACTOSIDES.
-!- SIMILARITY: BELONGS TO FAMILY 35 OF GLYCOSYL HYDROLASES.
EMBL; AJ005042; E1321550; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL;
                                                                                    ENV
                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                     PROSITE; PS01182; GLYCOSYL_HYDROL_F35;
HYDROLASE; GLYCOSIDASE.
ACT_SITE 187 187 PROTON DOI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ESTEBAN R., DOPICO B., LABRADOR E.;
SUBMITTED (APR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS
-!- CATALYTIC ACTIVITY: HYDROLYSIS OF TERMINAL, NON-1
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[1]
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 KARLSSON
                                                          HUMAN IMMUNODEFICIENCY VIRUS TYPE 1 (HIV-1)
VIRUSES; RETROID VIRUSES; RETROVIRIDAE; LENT
                                                                                                ENVELOPE
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                                                                                                                                                                                                                       689 CGQPTQKW
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                                                                                                                                                                                                          CADPSQKW
ICE FROM N.A.
IE; 96190564.
, MORRISON S.G., I
                                                                                              GLYCOPROTEIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                          730 AA;
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          ROBERTSON D.L.,
                                                                                                            822
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 MORGADO
                                                                                                         LAST SEQUENCE UPDATE)
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Pred.
3; M
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D1C226FF CRC32;
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                                                                                                                                                                                                                                                      DB 10; Len
. 2.78e+00;
-hes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 10; Len
2.78e+00;
-hes 0;
                                                                                                                                                            859
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GALVAO-CASTRO B.,
                                                           LENTIVIRUS
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                                                                                                                                                                                                                                                                                Length 730;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 307;
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BRIESEN
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Best Local
                                                                                                                                                                                               [5]
SEQUENCE FROM N.A.
SEQUENCE FROM N.A., C
RUSSO J.J., BOHENZKY R.A., C
RUSSO J.J., PERUZZI D., EDEF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VMIP-1B.

VMIP-1B.

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VIP-1B.

KAPOSI'S SARCOMA-ASSOCIATED HERPESVIRUS:

AND KAPOSI'S SARCOMA-ASSOCIATED HERPESVIRUS:

VIRUSES; DSDNA VIRUSES; NO RNA STAGE; HERPES

VIRUSES; NO RNA STAGE; HERPES

VIRUSES; RHADINOVIRUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JLT 29
Q98157
Q98157;
Q98157;
01-FEB-1997
01-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE: 97094384.

MOORE P.S., BASHOFF C., WEIS:

"Molecular mimicry of human of the service of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
NICHOLAS J., RUVOLO V.R.,
HENDRICKSON S., GUO H.G.,
SUBMITTED (SEP-1996) TO EM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUBMITTED (MAY-1995) TO
EMBL; U27443; G1495977;
PFAM; PF00516; GP120; 1
PFAM; PF00517; GP41; 1.
                                                                                                                                                                                                                                                                                                                                                                                         RUSSO J.J., PARRY J.P.,
                                                                                                                      SEQUENCE FROM N.A. MEDLINE; 97296220.
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PARRY J.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE; 97094384.
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NEIPEL F., ALBRECHT J.C., FLECKENSTEIN B.; "Cell-homologous genes in the Kaposi's sarcoma-associated human herpesvirus 8: determinants of its pathogenicity?"; J. VIROL. 71:4187-4192(1997).
                                                                                                                                                                                                                                                                                                                                                                SUBMITTED
                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE;
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"MOLECULAR cloning and analysis of functional envelope genes from human immunodeficiency virus type 1 sequence subtypes A through G. WHO and NIAID Networks for HIV Isolation and Characterization.";

J. VIROL. 70:1651-1657(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Nucleotide (HHV8).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31 ICSAAEEKWV 40
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                                                                                                                                                                                                                                                                                                                                                          ., BOHENZKY R.A.,
., PERUZZI D., EDI
(OCT-1996) TO EMI
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(TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., MADDALENA PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P.S.; sequence of the Kaposi sarcoma-associated herpesvirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAD.
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llarity 50.0%;
Conservative
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97274 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ö
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                                                                                                                                                                                                           A., CHIEN M.C., CHEN EDELMAN I.S., CHANG EMBL/GENBANK/DDBJ DA
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08,
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cytokine
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Pred. No. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93:14862-14867(1996).
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2.78e+00;
2;
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                                                                                                                                                                                                                                          YAN M.,
MOORE P.
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P.S.;
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.S.;
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SEQUENCE FROM N.A.

SUBMITTED (SEP-1996) TO EMBL
EMBL; U67775; G1562496; -.

EMBL; U75698; G1718264; -.

EMBL; U93872; G2246517; -.

EMBL; U71365; G3551760; -.

PFAM; PF00048; 118; 11

HYPOTHETICAL PROTEIN.

SEQUENCE 94 AA; 10486 MW;
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O811100; O81100; ORTHORY; PKI;
O81101; ORTHORY; PKI;
O1-NOV-1998 (TREMBLREL. 08, CREATED)
O1-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDATE)
O1-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
O1-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
O1-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                        TRANSIT
ACT_SITE
SEQUENCE
                                                                                                                                                                                                                                                                                --- SIMILARITY: BELONGS TO FAMILY EMBL; AF020390; G3299896; --- PROSITE; PS01182; GLYCOSYL-HYDROL_TRANSIT PEPTIDE; HYDROLASE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LYCOPERSICON ESCULENTUM (TOMATO).

EUKARYOTA; VIRIDIPLANTAE; CHAROPHYTA/EMBRYOPHYTA GROUP; EMBRYOPHYTA;

TRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA; MAGNOLIOPHYTA;

EUDICOTYLEDONS; ASTERIDAE; SOLANANAE; SOLANALES; SOLANACEAE; SOLANUM.
                                                                                                                                                                                                                                                                                                                                                                                     PLANT PHYSIOL. 117:417-423(1998).
-!- CATALYTIC ACTIVITY: HYDROLYSIS OF TERMINAL, NON-REDUCING GALACTOSE RESIDUES IN BETA-D-GALACTOSIDES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
STRAIN-RUTGERS; TISSUE-TOMATO FRUIT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMITH D.L., STARRETT D.A., GROSS K.C.;
"A gene coding for tomato fruit beta-galactosidase II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             during fruit ripening. Cloning, characterization,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 98289087
                                                682 CGQPSQRW 689
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  CADPSQKW
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724 AA;
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larity 62.5%;
Conservative
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larity 54.5%;
Conservative
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80513
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                                                                                                Score 56; DB 10;
Pred. No. 4.33e+00,
3; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 56; DB 14;
Pred. No. 4.33e+00;
2; Mismatches 3
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LD78 Gln48>Glu.
SCI; stem cell inhibition; LD78; Ac
macrophage inflammatory protein; mu
psoriasis; hyperproliferation.
Homo sapiens.
W09313206-A.
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23-DEC-1992; GB-027319.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                           R38926;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 providing better tissue penetration

Example 15; Page 55; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.
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SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha; SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha; macrophage inflammatory protein; multimer; tumour therapy; psoriasis; hyperproliferation.

Homo sapiens.

W09313206-A.
                                08-JUL-1993.
23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards RM,
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LD78 Phe28>Glu, Gln48>Glu.
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Local Similarity 91.7%;
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multimer; tumour therapy;
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Stem cell inhibitor
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Varient stem cell
MIP-1alpha.
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R39081 standard; Protein; 64
R39081;
23-NOV-1993 (first entry)
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providing better tissue penetration

Strample 1; Page 48-50; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-

Canalogues of natural stem cell inhibitors, such as LD78 and MIP-

Canalogues of natural stem cell inhibitors, such as LD78 and MIP-

Canalogues of natural stem cell inhibitors, such as LD78 and MIP-

Caproperties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used in tumour therapy, psoriasis or other diseases involving hyper-

Caproliferative stem cells.

Chost pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha analogues correspond to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                                              providing better tissue penetration

Example 49; Page 68; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hunter MG; WPI; 93-227322/28.

Protein with stem cell inhibition activity, e.g. LD78 or M1P-1 alpha - unable to form stable multimer higher than dodecamer,
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23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
23-DEC-1991; GB-027319.
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(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
(CTAIG S. Czaplewski LG, Edwards RM,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N1-6 LD78 Pro7>Ser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-NOV-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
nes 11; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 EICADPSEEWVQ
                          qvcadpseewvq
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EICADPSEEWVQ
                                                                                                                                                                                                                                              pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with
8>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    evcadpseewvq
                                                                                               Similarity
10; Conser
                                                                                                                                                                                                    correspond
63 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97.8%;
llarity 91.7%;
Conservative
                                                                                               Conservative
                                             53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  59
                                                                                                                       94.6%;
                                                                                                                                                                                                                            6
                                                                                                                                                                                                                         the pref. LD78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  63
                                                                                            Score 87; DB 7; I
Pred. No. 1.51e-01;
2; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₽
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90; DB 7; L
No. 7.79e-02;
                                                                                                                                                                                                                         analogues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gilbert
                                                                                                                                               Length 63;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                               Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  or
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                                                                                               Gaps
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23-DEC-1992; GB-027319.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
14-DEC-1992; GB-021587.
GRBI-) BRITISH BIO-TECHNOLOGY LTD.
                                                                                                                                                                                                                                                                                                                                   macrophage inflammatory protein; psoriasis; hyperproliferation. Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   providing better tissue penetration
Example 59; Page 71; 294pp; English.
Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.
                                                  lalpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution properties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used in tumour therapy, psoriasis or other diseases involving hyperproliferative stem cells.
                                                                                                                                                                                 Protein with stem cell inhibition activity, e.g. LD78 or M1P-1 alpha - unable to form stable multimer higher than dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gln18>Glu) and, esp., Asp26> analogues correspond to the
                                                                                                                                      providing better tissue penetration
Example 23; Page 58; 294pp; English.
Analogues of natural stem cell inhibitors, such as LD78 and MIP-
                                                                                                                                                                                                                                                                                                                                                                                                            R38948;
23-NOV-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LD78 C65-69.
SCI; stem cell inhibition; LD78; macrophage inflammatory protein; psoriasis; hyperproliferation.
Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Prej analogues correspond to the pref. LD78 analogues. Sequence 66 AA;
                                                                                                                                                                                                                             Hunter MG
                                                                                                                                                                                                                                          Craig S,
                                                                                                                                                                                                                                                                  23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
                                                                                                                                                                                                                                                                                                                                                                                                                                          R38948 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hunter MG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                       (BRBI-) BRITISH BIO-TECHNOLOGY LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           48 qvcadpseewvq
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Match
                                                                                                                                                                                                              93-227322/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EICADPSEEWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       pref. LD78 analogues are Phel2>Gln, Lys44>Ser,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                in with stem cell inhibition activity, e.g. LD78 or MIP-1 - unable to form stable multimer higher than dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                         Czaplewski LG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 64 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Protein; 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Asp26>Ala and
                                                                                                                                                                                                                                         Edwards RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
Pred.
2; M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pref. LD78 analogue
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                                                                                                                                                                                                                                                                                                                                                                     ACT2; MIP-lalpha;
multimer; tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACT2; MIP-lalpha;
multimer; tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      87;
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                                                                                                                                                                                                                                         Gilbert RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gilbert RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 7;
1.51e-01
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                                                                                                                                                                                                                                                                                                                                                                     tumour therapy;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pref. MIP-lalpha
                         Pref.
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                                         Arg17>Glu
                          MIP-lalpha
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      Best Loc
Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R38934;
23-NOV-1993
LD78 Ile24>T
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23-DEC-1991; (
14-OCT-1992; (
                                                                                                 Hunter MG;
WPI; 93-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   providing better tissue penetration

Example 26; Page 59; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.
                                                                                                                                                                08-JUL-1993.
23-DEC-1992; GB-027319.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards RM,
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Craig S, Czaplewski LG, Edwards F
Hunter MG;
                                                                                                                                                                                                                                                                                                                                                                                                          Homo
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                                  Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                          psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             macrophage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R38934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Protein with stem cell inhibition activity, e.g. \mathtt{LD78} alpha - unable to form stable multimer higher than doc
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08-JUL-1993.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R38951;
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   providing
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::|||||||||
1 EICADPSEEWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             stem cell inhibition; LD78;
ophage inflammatory protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qvcadpseewvq
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better tissue penetration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     correspond to the pref. LD78 analogues 66 AA;
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GB-027587.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               entry)
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Pred. No. 1.51e-01;
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Pred. No. 1.51e-01
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         multimer; tumour therapy;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACT2; MIP-lalpha;
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W09313206-A.

08-JUL-1993.
23-DEC-1992; GB-02390.
23-DEC-1991; GB-027319.

R 14-OCT-1992; GB-021587.
A (BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Czaplewski LG, Edwards RM, G
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Best Local :
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Best Local
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                                                                                                                                     R39089;
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Example 82: Page 79: 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with
Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha
analogues correspond to the pref. LD78 analogues.

Sequence 69 AA;
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Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.
                 LD78 Gln33>Ser. SCI; stem cell inhibition; LD78; macrophage inflammatory protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                macrophage inflammatory protein; multimer; tumour therapy; psoriasis; hyperproliferation.

Homo sabiens
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WPI; 93-22
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SCI; stem cell inhibition; LD78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Protein with stem cell inhibition activity, e.g. LD78 or M1P-1 alpha - unable to form stable multimer higher than dodecamer,
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                                                                                                      23-NOV-1993 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                        10;
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                                                                                                                                                               Protein;
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Pred. No. 1.51e-01;
                                                                                                                                                               B
                         ACT2; MIP-lalpha;
multimer; tumour
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No. 1.
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1.51e-01
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Example 67; Page 74; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-1 alpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution properties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used in tumour therapy, psoriasis or other diseases involving hyper-1 compositive stem cells.

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with analogues correspond to the pref. LD78 analogues.

Sequence 69 AA;
Query Match
Best Local Similarity
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Best Local Similarity 83.3%;
Matches 10; Conservative
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23-DEC-1992; GB-027319.
23-DEC-1991; GB-027319.
14-CCT-1992; GB-02187.
14-RITISH BIO-TECHNOLOGY LTD.
CRAIG S, CZaplewski LG, Edwards RM,
Hunter MG;
WPI; 93-227322/28.
                                                                                                                                                                                                               providing better tissue penetration

Example 69; Page 75; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.
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23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards R
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SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha; macrophage inflammatory protein; multimer; tumour psoriasis; hyperproliferation.
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R39091 standard; Protein;
R39091;
                                                                                              Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha analogues correspond to the pref. LD78 analogues. Sequence 69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer,
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      94.6%;
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Pred. No. 1.
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      Score 87; DB 7;
Pred. No. 1.51e-01
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1.51e-01;
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Example 57; Page 70-71; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-1 alpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution properties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used in tumour therapy, psoriasis or other diseases involving hyper-

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-1alpha analogues correspond to the pref. LD78 analogues.
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08-9313206-A.
08-941-1993.
23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
23-DEC-1991; GB-021587.
14-BET-) BRITISH BIO-TECHNOLOGY LTD.
Craig S., Czaplewski LG, Edwards RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SCI; stem cell inhibition; LD78; macrophage inflammatory protein; psoriasis; hyperproliferation. Homo sapiens.
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Sequence
providing better tissue penetration
Example 54; Page 69-70; 294pp; English.
Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
                                                                                                                                                                                                      WPI; 93-227322/28.

Protein with stem cell inhibition activity, e. alpha - unable to form stable multimer higher
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LD78 Arg45>Ser.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R38979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R38979 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hunter MG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI ) BRITISH BIO-TECHNOLOGY LTD.
(Craig S, Czaplewski LG, Edwards RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               psoriasis; hyperproliferation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-NOV-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R3898:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R38982 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>بــ</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EICADPSEEWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qvcadpseewvq 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      h 94.6%;
Similarity 83.3%;
10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A
A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protein; 69 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     69
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Pred.
2; M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACT2; MIP-lalpha;
multimer; tumour therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACT2; MIP-lalpha;
multimer; tumour therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 7;
1.51e-01
                                                                                                                                                                                                                                                                                                                                                                                    Gilbert RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gilbert RJ
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                                                                                                                                                                                                           LD78 or MlP-1
an dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
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RESULT

ID R3

AC R3

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DE LI

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PD 01
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ACC 
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Best Local
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Best Local
                                                                                                  23-NOV-1993 (first entry)
LD78 Ala4>Ser
SCI; stem cell inhibition; LD78;
macrophage inflammatory protein;
psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            lalpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution properties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used in tumour therapy, psoriasis or other diseases involving hyper-proliferative stem cells.

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha analogues correspond to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LD78 Ala3>Ser.
SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha;
macrophage inflammatory protein; multimer; tumour therapy;
psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gln18>Glu) and, esp., As analogues correspond to Sequence 69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  providing better tissue penetration
Example 46; Page 67; 294pp; English.
Analogues of natural stem cell inhibitors, such as LD78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R38971 standard; Protein;
R38971;
23-NOV-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       in tumour therapy, psoriasis or other diseases invol proliferative stem cells.

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser,
                                                     Homo sapiens. WO9313206-A.
                                                                                                                                                                                                                                            R38972 standard;
R38972;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-DEC-1992; G02390,
23-DEC-1991; GB-027319.
3-DEC-1991; GB-021587.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protein with stem cell inhibition activity, e.g. LD78 or M1P-1 alpha - unable to form stable multimer higher than dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 93-227322/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hunter MG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Craig S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9313206-A.
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  23-DEC-1992; G02390
                                                                                                                                                                                                                                                                                                                                                                                                                                      48
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                        Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Protein; 69
                                                                                                                                                                                                                                                                                                                                                                                                                                      59
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha
to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                        69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Edwards RM,
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Pred. No.
2; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 87; DB 7; I
Pred. No. 1.51e-01;
2; Mismatches (
                                                                                                                                    ACT2; MIP-lalpha; multimer; tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
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1.51e-01;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and MIP-
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                                                                                                                                     protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer, providing better tissue penetration.

Example 53; Page 69; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-1 alpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution properties leading to enhanced productivity and greater therapeutic properties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used in tumour therapy, psoriasis or other diseases involving hyper-1 LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha analogues correspond to the pref. LD78 analogues.
                                                                            Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
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                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                              23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
23-DEC-1991; GB-021587.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
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R38978;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.
Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu ('Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalph
analogues correspond to the pref. LD78 analogues.
Sequence 69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   providing better tissue penetration
Example 47; Page 67; 294pp; English.
Analogues of natural stem cell inhibitors, such as LD78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-DEC-1991; GB-027319.
14-0CT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LD78 Lys44>Ser.
SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha;
macrophage inflammatory protein; multimer; tumour therapy;
psorlasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    lalpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution properties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used
                                                                                                                                                                                                                                                                                                                                                                     Hunter MG;
WPI; 93-227322/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
W09313206-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-NOV-1993 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          48 qvcadpseewvq
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 EICADPSEEWVQ 12
 EICADPSEEWVQ
                               qvcadpseewvq 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  in with stem cell inhibition activity, e.g. LD78 or MIP-1 - unable to form stable multimer higher than dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard;
                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10;
                                                               10;
                                                                                                                           correspond to 69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein;
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                                                                            94.6%;
                                                               Score
Pred.
2; M
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Pred. No. 1.51e-01
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                           87; DB 7;
No. 1.51e-01
                                                                                                                                                                                                                                                                                                                                                                                                       RM,
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                                                                                           Length 69;
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RESULTANGE OF THE PROPERTY OF 
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Example 52; Page 69; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-1 alpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution properties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used in tumour therapy, psoriasis or other diseases involving hyperupiliterative stem cells.

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with Calls) and, esp., Asp26>Ala and Glu65>Ser. Pref. MIP-laipha analogues correspond to the pref. LD78 analogues.
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Best Local :
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08-JUL-1993.
23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
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R38977
R38977;
                    providing better tissue penetration

Example 36; Page 63; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha; macrophage inflammatory protein; multimer; tumour therapy; psorlasis; hyperproliferation.

Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha; macrophage inflammatory protein; multimer; tumour therapy;
                                                                                                                                                                                                                                                      Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                  23-DEC-1992; G9C390,
23-DEC-1991; GB-027319.
14-CCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
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                                                                                                                                                                                                                                                                                                                     WPI; 93-227322/28.
                                                                                                                                                                                                                                                                                                                                             Hunter MG;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LD78 Asp5>Arg
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1 EICADPSEEWVQ
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Similarity 83.3%;
10; Conservative
                                                                                                                                                                                                                                                                                                                                                                           Czaplewski IG,
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psoriasis or cells.
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Pred. No. 1.
2; Mismatc
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1.51e-01;
1.52 0;
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                                                                                   therapeutic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer, pri alpha - unable to form stable multimer higher than dodecamer, pri providing better tissue penetration

Example 42; Page 65; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-C lalpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution properties leading to enhanced productivity and greater therapeutic cutility as stem cell protective agents. The analogues may be used in tumour therapy, psoriasis or other diseases involving hyper-c proliferative stem cells.

Chost pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with Gln18>Glu) and, esp., Asg26>Ala and Glu66>Ser. Pref. MIP-lalpha canalogues correspond to the pref. LD78 analogues.
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Matches
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                      Homo sapiens.

W09313206-A.

08-JUL-1993.

23-DEC-1992; G02390.

23-DEC-1991; GB-027319.

14-OCT-1992; GB-021587.

(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
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08-JUL-1993.
08-JUL-1993.
23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
14-OCT-1992; GB-021587.
14-OCT-1992; GB-021587.
15-DEC-1993: GB-021587.
16-DEC-1993: GB-021587.
16-DEC-1993: GB-021587.
17-DEC-1993: GB-021587.
18-DEC-1993: GB-02
                                                                                                                                                                                          LD78 Leu67>Glu
SCI; stem cell inhibition; LD78;
macrophage inflammatory protein;
psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LD78 arg17>Glu, Gln18>Glu.
SCI; stem cell inhibition; LD78;
macrophage inflammatory protein;
psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with Gin18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha analogues correspond to the pref. LD78 analogues. Sequence 69 AA;
                                                                                                                                                                                                                                                                                               R38968;
23-NOV-1993
                                                                                                                                                                                                                                                                                                                                          R38968 standard;
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23-NOV-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   48 qvcadpseewvq
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Local Similarity 83.3%;
les 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
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10; Conser
Czaplewski LG,
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                                                                                                                                                                                                                                                                                                                                             Protein; 69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94.6%;
Edwards
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2; 1
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Pred.
2; M
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                                                                                                                                                                                                                 ACT2; MIP-lalpha;
multimer; tumour therapy;
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multimer; tumour therapy;
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  RM,
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  Gilbert
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RESULT ID RI AC RI

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SEXAMPLE 43; Page 65-66; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-

lalpha, having mutations to prevent or reduce multimer formation

beyond certain stages (e.g. dodecamer), have improved solution

properties leading to enhanced productivity and greater therapeutic

utility as stem cell protective agents. The analogues may be used

in tumour therapy, psoriasis or other diseases involving hyper-

crocliferative stem cells.

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with

cln18x5clu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha

canalogues correspond to the pref. LD78 analogues.
                                                                                                       Query Match
Best Local S
Matches 1
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Best Local
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23-DEC-1992;
23-DEC-1991;
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WPI; 93-22
                                                                                                                                                                                                                 lalpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution properties leading to enhanced productivity and greater therapeut utility as stem cell protective agents. The analogues may be use in tumour therapy, psoriasis or other diseases involving hyper-proliferative stem cells.

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (wi Gin18>Glu) and, esp., Asp26>Ala and Glu65>Ser. Pref. MIP-lalpha analogues correspond to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SCI; stem cell inhibition; LD78; macrophage inflammatory protein; psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R38975 standard; Protein;
R38975;
23-NOV-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               providing better tissue penetration
Example 50; Page 68; 294pp; English.
Analogues of natural stem cell inhibitors,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hunter MG;
WPI; 93-227322/28.
Protein with stem cell inhibition activ alpha - unable to form stable multimer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Craig S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-DEC-1991; GB-077319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9313206-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LD78 Phe28>Tyr.
                                                   48
                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  48 gvcadpseewvg
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EICADPSEEWVQ
                                                qvcadpseewvq
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                                                                                                             10;
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                                                                                                             Conservative
                                             59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  59
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                                                                                                                                 94.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               inhibition activity, e.g. LD78 or MlP-stable multimer higher than dodecamer,
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Pred.
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACT2; MIP-lalpha;
multimer; tumour therapy;
                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
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                                                                                                                                 87; DB 7; I
No. 1.51e-01;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 7; L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gilbert RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  such as LD78 and MIP-
                                                                                                                                                           Length 69;
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                                                                                                                                                                                                                                                                                                                                                                                     therapeutic
may be used
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                                                                                                          Gaps
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TRESULT

ACCOMPANDA PRESCRIPTION

ACCOMPANDA P
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Best Local S
Matches 1
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08-7UL-1993.

23-DEC-1992.

08-027319.

14-0CT-1992.

08-021587.

(BRBI-) BRITISH BIO-TECHNOLOGY LTD.

(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
                     in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.
Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with
Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha
analogues correspond to the pref. LD78 analogues.
                                                                                                                                  Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer, providing better tissue penetration
Example 40; Page 64-65; 294pp; English.
Analogues of natural stem cell inhibitors, such as LD78 and MIP-1 alpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer) have improved solution properties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used in tumour therapy, psoriasis or other diseases involving hyper-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LD78 Ala3>Glu.
SCT: stem cell inhibition; LD78; ACT2; MIP-lalpha;
macrophage inflammatory protein; multimer; tumour therapy;
psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 providing better tissue penetration

Example 48; Page 67; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LD78 Leu67>Ala. SCI; Stem cell inhibition; LD78; macrophage inflammatory protein; psoriasis; hyperproliferation. Homo sagiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        л 22
R38965 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pre analogues correspond to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Hunter MG;
WPI; 93-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R38965;
23-NOV-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        alpha
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WPI; 93-227322/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
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08-JUL-1993.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
WO9313206-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Protein with stem cell inhibition activity, e.g. LD78 or MIP-
alpha - unable to form stable multimer higher than dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-NOV-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
nes 10; Conse
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94.6%;
larity 83.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 87; DB 7; L
Pred. No. 1.51e-01;
2; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ₿
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACT2; MIP-lalpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gilbert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gilbert RJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Arg17>Glu (w
f. MIP-lalpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or MlP-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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        AC DE PRESENTATION OF PRESENTA
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Best Local S
Matches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TT 23
R38964 standa
R38964;
23-NOV-1993
                                                                                                    23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
23-DEC-1991; GB-021587.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards RM,
                                                                                                                                                                                                                                                                                                                   LD78 Asp26>Ser.
SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha;
macrophage inflammatory protein; multimer; tumour
psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LT 24
R38953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 lalpha, having mutations to prevent or reduce multimer formation beyond certain stages (e.g. dodecamer), have improved solution properties leading to enhanced productivity and greater therapeutioutility as stem cell protective agents. The analogues may be used in tumour therapy, psoriasis or other diseases involving hyperproliferative stem cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer, providing better tissue penetration Example 39; Page 64; 294pp; English.
Analogues of natural stem cell inhibitors, such as LD78 and MI analogues of natural stem cell inhibitors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S. Czaplewski LG, Edwards RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LD78 Leu2>Glu. SCI; stem cell inhibition; LD78; macrophage inflammatory protein;
WPI; 93-227322/28.

Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Most pref. LD78 analogues are Phe12>Gln, Lys44>Ser, Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Preanalogues correspond to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                     Homo sapiens.
W09313206-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               analogues correspond to 
Sequence 69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hunter MG;
WPI; 93-227322/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      psoriasis; hyperproliferation
                                                                                    Hunter MG;
                                                                                                                                                                                                                                                                                                                                                                                                                          23-NOV-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                   R38953;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              48 qvcadpseewvq 59
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 EICADPSEEWVQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94.6%;
83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 87; DB 7;
Pred. No. 1.51e-01
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 87; DB 7;
Pred. No. 1.51e-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                              multimer; tumour therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACT2; MIP-lalpha;
multimer; tumour therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                            Gilbert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gilbert RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
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                                                                                                            짇
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pref. MIP-lalpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             greater therapeutic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Arg17>Glu (with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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     RESULT
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Best Local S
Matches 1
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Best Local
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Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with
Gln18>Glu) and, esp., Asp26>Ala and Glu65>Ser. Pref. MIP-lalpha
analogues correspond to the pref. LD78 analogues.
                                                                                                            R38969;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 providing better tissue penetration

Example 45; Page 66; 294pp; English.
Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W09313266-A.
08-JUL-1993.
23-DEC-1992; G02390.
23-DEC-1992; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LD78 Leu2>Ala.
SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha; macrophage inflammatory protein; multimer; tumour therapy; psoriasis; hyperproliferation.
23-NOV-1993 (first entry)
LD78 Ser146>Ala.
SCI; stem cell inhibition; LD78;
macrophage inflammatory protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Prefanalogues correspond to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha unable to form stable multimer higher than dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hunter MG;
WPI; 93-227322/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R38970 standard; Protein; R38970;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     in tumour therapy, psoriasis or other diseases involving proliferative stem cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Craig S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-NOV-1993 (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  providing better tissue penetration 
Example 28; Page 60; 294pp; English
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1 EICADPSEEWVQ 12
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                                                                                                                                                                                                                                           standard;
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                                                                                                                                                                                                                                                                                                                                                                                 Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              69 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          69 AA;
                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                       Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94.68;
                                                                                                                                                                                                                                                                                                                                                                              94.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         entry)
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                                                                                                                                       69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 87;
Pred. No.
2; Misma
                                                                                                                                                                                                                                                                                                                                                                              Score 87; I
Pred. No. 1.
                                                                                                                                       A
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     multimer;
                              ACT2; MIP-lalpha;
                                                                                                                                                                                                                                                                                                                                                     Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 7; L.
1.51e-01;
0;
                                                                                                                                                                                                                                                                                                                                                                              DB 7; L
1.51e-01;
tumour therapy;
                                                                                                                                                                                                                                                                                                                                                                                                    Length 69;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 69;
                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pref. MIP-lalpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
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Best Local
                   Query Match 94.6%;
Best Local Similarity 83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
    Matches
                                                                                                                       providing better tissue penetration

Example 51; Page 68-69; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      LD78 Asp5>Ser.
SCI; stem cell inhibition; LD78; ACT2; MIP-lalpha;
macrophage inflammatory protein; multimer; tumour therapy;
psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   providing better tissue penetration

Example 44; Page 66; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.
                                                                                                                                                                                                                                                                WPI; 93-227322/28.

Protein with stem cell inhibition activity, e.g. LD78 or MlP-1 alpha - unable to form stable multimer higher than dodecamer,
                                                                               Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP·lalpha analogues correspond to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                                                                                            23-DEC-1992; G02390,
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Protein with stem cell inhibition activity, e.g. LD78 or M1P-1 alpha - unable to form stable multimer higher than dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
                                                                                                                                                                                                                                                                                                                Hunter MG;
                                                                                                                                                                                                                                                                                                                               Craig S,
                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
WO9313206-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R38976,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       analogues
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hunter MG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Craig S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
WO9313206-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                48 qvcadpseewvq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EICADPSEEWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
    10;
                                                              correspond to 69 AA;
                                                                                                                                                                                                                                                                                                                               Czaplewski LG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       correspond to the pref. LD78 69 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
    Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Edwards
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Score 87; DB 7; I
Pred. No. 1.51e-01;
2; Mismatches C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 87; DB 7;
Pred. No. 1.51e-01
2; Mismatches
                                                                                                                                                                                                                                                                                                                                 RM,
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                                                                                                                                                                                                                                                                                                                                 Gilbert
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 69;
                                 Length 69
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    0;
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    Indels
   0;
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   Gaps
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Best Local s
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R39092 standard; Protein; 6
R39092;
23-NOV-1993 (first entry)
LD78 Ser32>Ala.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-JUL-1993.
08-JUL-1993.
23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
14-DCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
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23-DEC-1992; G02390.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        providing better tissue penetration

Example 70; Page 75; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
proliferative stem cells.
providing better tissue penetration
Example 68; Page 75; 294pp; English.
Analogues of natural stem cell inhibitors, suc
lalpha, having mutations to prevent or reduce
                                                                                                                                                                Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
WO9313206-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LD78 Tyr61>Ala. SCI; stem cell inhibition; LD78; macrophage inflammatory protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R39090 standard; Protein; R39090; Girst entry LD78 Tyr61>Ala.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha analogues correspond to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SCI; stem cell inhibition; LD78; macrophage inflammatory protein; psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Protein with stem cell inhibition activity, e.g. LD78 or MIP-1 alpha - unable to form stable multimer higher than dodecamer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
W09313206-A.
                                                                                                                                                                                                                                                                                                Hunter MG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  psoriasis; hyperproliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 93-227322/28.
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multimer; tumour therapy;
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Example 66; Page 74; 294pp; English.

Analogues of natural stem cell inhibitors, such as LD78 and MIP-
lalpha, having mutations to prevent or reduce multimer formation
beyond certain stages (e.g. dodecamer), have improved solution
properties leading to enhanced productivity and greater therapeutic
utility as stem cell protective agents. The analogues may be used
in tumour therapy, psoriasis or other diseases involving hyper-
host pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with
Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 beyond certain stages (e.g. dodecamer), have improved solution properties leading to enhanced productivity and greater therapeutic utility as stem cell protective agents. The analogues may be used in tumour therapy, psoriasis or other diseases involving hyper-proliferative stem cells.

Most pref. LD78 analogues are Phel2>Gln, Lys44>Ser, Arg17>Glu (with Gln18>Glu) and, esp., Asp26>Ala and Glu66>Ser. Pref. MIP-lalpha analogues correspond to the pref. LD78 analogues.
                                                                                                                                                                                                                                                                                                                                                                            08-JUL-1993.
23-DEC-1992; GD2390.
23-DEC-1991; GB-027319.
14-OCT-1992; GB-021587.
(BRBI-) BRITISH BIO-TECHNOLOGY LTD.
Craig S, Czaplewski LG, Edwards RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LD78 Ser1>Ala. SCI; stem cell inhibition; LD78; macrophage inflammatory protein;
                                                                                                                     analogues correspond Sequence 69 AA;
                                                                                                                                                                                                                                                                                                                  Protein with stem cell inhibition activity, e.g. LD78 or MlP-1 alpha - unable to form stable multimer higher than dodecamer,
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larity 83.3%;
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multimer; tumour therapy;
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#title Three human homologs of a murine gene encoding of stem cell proliferation.

#cross-references MUID:91103879

#accession A30412
 Query Match
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#title
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#authors Obaru, K.; Fukuda, M.; Maeda, S.; Shimada, K.
#journal J. Beicchem. (1986) 99:885-994
#title A cDNA clone used to study mRNA inducible in human
#tross-references MUID:86223879
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macrophage inflammatory protein 1-alpha precursor - human
LD78-alpha protein precursor; lymphocyte tumor
promoter-induced protein; macrophage inflammatory protein
homolog GOS19-1; MIP-lalpha; pAT464; small inducible
cytokine A3; T-cell activation protein 1
#formal_name Homo sapiens #common_name man
03-Aug-1992 #sequence_revision 03-Aug-1992 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     J. Immunol. (1989) 142:1582-1590
Mitogenic activation of human T cells induces two cl
related genes which share structural similarities
new family of secreted factors.
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                                                                                                                                  *superfamily macrophage inflammatory protein
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Structures of human genes coding for cytokine LD78
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Matches 10; Conservative
                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                #authors Irving, S.G.; Zipfel, P.F.; Balke, J.; McBride, O.W.; Morton, C.C.; Burd, P.R.; Siebenlist, U.; Kelly, K.

#journal Nucleic Acids Res. (1990) 18:3261-3270

#title Two inflammatory mediator cytokine genes are closely linked and variably amplified on chromosome 17q.

#cross-references MUID:90287702

#accession S10157
                                                                                                                                                                                                                  ##cross-references GDB:120369; OMIM:182284
#map_position 17q11-17q21
#introns 26/1; 64/2
ASSIFICATION #superfamily macrophage inflammatory protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #authors
#journal
#title
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               #authors Blum, S.; Forsdyke, R.E.; Forsdyke, D.
#journal DNA Cell Biol. (1990) 9:589-602
#title Three human homologs of a murine gene
of stem cell proliferation.
#cross-references MUID:91103879
#accession B30412
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#cross-references MUID:90287155
                                                                                                                                                                                                                                                                                                                                       ##molecule_type mRNA
##residues 1-93 ##label IRV
##cross-references EMBL:X52149; NID:g34750; PID:g296666
##CT This protein is a member of a "small inducible" or "activation
NT This protein is a member of a likely to be an early-acting
specific" gene family, is likely to be an early-acting
interleukin, and is the product of a putative GO/Gl switch ge
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ##molecule_type DNA
##residues 1-93 ##label BLU
##cross-references GB:M24110; GB
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##residner
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##cross-references GB:D90145; NID:g219907; PID:d1014876;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ##status
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72 QVCADPSEEWVQ 83
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                                       10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B35673 #type complete
LD78-beta protein precursor - hu
macrophage inflammatory protein
inducible cytokine A4
                                                                                                                   #domain signal sequence #status predicted #label
#product LD78-beta protein #status predicted #lal
#length 93 #molecular-weight 10161 #checksum 7784
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Pred. No. 6.80e-06;
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2; Mismatches 0;
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Best Local Similarity 83.3%;
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#title
                                                                                                        #authors Sporn, S.A.; Eierman, D.F.; Johnson, C.E.; Morris, J.;
Martin, G.; Ladner, M.; Haskill, S.

#journal J. Immunol. (1990) 144:4434-4441

#title Monocyte adherence results in selective induction of novel genes sharing homology with mediators of inflammation and tissue repair.

#cross-references_MUID:90257367
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#accession S07723
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##cross-references GB:M57441; NID:g205333; PID:g205334
##cross-references object of the codon GAA for residue 62 as
##note the authors translated the codon GAA for residue 62 as
Lys and GCT for residue 63 as Leu
      ##status
##molecule_type mRNA
1-50 ##label SPO
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Biochem. Biophys. Res. Commun. (1991) 174:504-509
Molecular cloning of rat monocyte chemoattractant protein-
(MCP-1) and its expression in rat spleen cells and tumor
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#formal_name Rattus norvegicus #common_name Norway rat
29-Jan-1993 #sequence_revision 29-Jan-1993 #text_change
*superfamily macrophage inflammatory protein
                                                                                      C60407
                                                                                                                                                                                                                                                                                                                            C50407 #type fragment monocyte adherence-induced protein 5 beta - human (fragment) #formal_name Homo sapiens #common_name man 05-Nov-1992 #sequence_revision 06-Nov-1992 #text_change
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#product immediate-early serum-responsive protein JE
#status predicted #label MAT
#length 148 #molecular-weight 16460 #checksum 4876
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Analysis of the rat JE gene promoter identifies an Ap-1 binding site essential for basal expression but not f
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Best Local Similarity
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**RETRENCE A37411

**RETRENCE A37411

**RETRENCE Chang, H.C.; Reinherz, E.L.

**Reinherz, E.L.

**L.

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#cross-references MUID:89071764
#accession A31767
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##cross-references GB:J04130; NII
                            ##molecule_type mRNA
##residues 1-92 ##label CHA
##cross-references GB:X16166; NII
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##cross-references GB:M69201; NID:9178021
##note 15-Ala was also found
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J. Biol. Chem. (1991) 266:17531-17536
The gene encoding the Act-2 cytokine. Genomic structure, HTLV-I/tax responsiveness of 5' upstream sequences, an chromosomal localization.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                macrophage inflammatory protein 1-beta precursor - human cytokine HC21; G-26 protein; H400 homolog; lymphocyte activation gene 1 protein (LAG-1); MIP-lbeta; pAT744; SCYA2 protein (misidentification); SIS gamma homolog; T-cell activation protein 2 (Act-2); T-cell activation protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Proc. Natl. Acad. Sci. U.S.A. (1988) 85:9704-9708 Identification, cloning, and characterization of an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A40978
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Pred. No. 1.89e-04
2; Mismatches
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Best Local
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#journal J. Immunol. (1989) 142:679-687
#title A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.

#cross-references_MUID:89093958
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#cross-references MUID:89140347

#accession B30574
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p_position 17g21-17g21
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Similarity 75.0%;
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                                      monocyte chemoattractant protein MCP-3
#formal_name Homo sapiens #common_name man
28-Oct-1994 #sequence_revision 28-Oct-1994 #text_change
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A novel polypeptide secreted by activated human T
                                                                                                          A54678 #type complete monocyte chemotactic protein 3 precursor -
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chemotaxis; cytokine; inflammation
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                                                                                                                                                                                                                                                                                                                    Conservative
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:es GB:M57503; NID:g339726; PID:g339727
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##cross-references EMBL:X71087; NID:9288396; PID:9288397
This protein induces proteinase secretion and chemotaxis
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##cross-references GB:X72309
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Local Similarity 75.0%;
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Molecular cloning of MCP-3: a human monocyte-derived monocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cloning of the cDNA and comparison with other chemokines. {\tt JC1478}
                    myelosuppressive activity JE0177
                                                        Jr., M.J.; Hangoc, G.; Kwon, B.S.
Biochem. Biophys. Res. Commun. (1998) 247:217-222
Isolation and characterization of LMC, a novel lymphocyte and monocyte chemoattractant human CC chemokine, with
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The human MCP-3 gene (SCYA7): cloning, seque
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cytokine; glycoprotein; inflammation
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lymphocyte and monocyte chemoattractant CC chemokine -
formal_name Homo sapiens *common_name man
lo-Jul-1998 *sequence_revision 10-Jul-1998 *text_change
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Pred. No. 1.89e-04;
2; Mismatches 1
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#title Cloning and expression of JE, a gene inducible by platelet-derived growth factor and whose product has cytokine-like properties.

#cross-references MUID:88234501

#accession A30209
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#title
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#journal J. Immunol. (1993) 150:5025-5032
#title cDNA cloning of guinea pig monocyte chemoattractant protein-1
#title and expression of the recombinant protein.
#cross-references MUID:93267104
                 #accession A44771
##molecule_type DNA; mRNA
##residues 1-148 ##label
##cross-references GB:J04467;
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##cross-references GB:M19681; NID:g193486; PID:g387168;
ROE A44771
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##residues 1-1
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#residues 1-120 ##label RES
##cross-references GB:L04985; NID:g349820; PID:g349821
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monocyte chemoattractant protein-1 - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
09-May-1997
                                                                            Kawahara, R.S.; Deuel, T.F.
J. Biol. Chem. (1999) 264:679-682
Platelet-derived growth factor-inducible gene JE is a member of a family of small inducible genes related to platelet factor 4.
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PDGF-inducible JE glycoprotein precursor - mouse
#formal_name Mus musculus #common_name house mouse
01-Dec-1989 #sequence_revision 01-Dec-1989 #text_change
01-May-1998
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                                                                          #title Structure of human monocyte chemotactic protein regulation by TPA.
#cross-references MUID:90290466
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##residues 1-92 ##label MOR
##cross-references GB:D17402; NID:g599577; PID:g599578
               ##residues 1-99 ##label 9
##cross-references GB:M37719;
                                           ##molecule_type DNA
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Local Similarity 66.7%;
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                                                                                                                                Shyy, Y.J.; Li, Y.S.; Kolattukudy, P.E. Biochem. Biophys. Res. Commun. (1990) 169:346-351
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#length 148 #mo.
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#length 92 #molecular-weight 10066
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26/1; 65/2
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20.Feb-1993 #sequence_revision 20-Feb-1993 #text_change
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formal_name Oryctolagus cuniculus #common_name
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Pred. No. 7.62e-04;
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Pred. No. 4.80e-04;
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SHY; NID:g187447; PID:g487124
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #authors Furutani, Y.; Nomura, H.; Notake, M.; Oyamada, Y.; Fukui, Yamada, M.; Larsen, C.G.; Oppenheim, J.J.; Matsushima, Feriournal Biochem. Biophys. Res. Common (1989) 159:249-255

#title Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF).
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#Journal Adv. Exp. Med. Biol. (1991) 305:47-56
#Litle Human monocyte chemoattractant protein-1 (MCP-1).
#cross-references_MUID:92095166
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##cross-references GB:X14768; NID:g34513; PID:g34514

##experimental_source glioma cell line U-105MG

IS1841
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##residues 1-99 ##label ROL
##cross-references GB:M30816; GB
                                                                       ##molecule_type protein
##residues 'X',25-99 ##label ROB
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##residues 1-99 ##label FUR
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Decock, B.; Conings, Damme, J.
                                                                                                                                                                                                                       Griffin, P.R.; Shabanowitz, J.; Hunt, D.F.; App. Proc. Natl. Acad. Sci. U.S.A. (1989) 86:1850-1854 Complete amino acid sequence of a human monocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A chemoattractant expressed in human sarcoma cells (tumor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-1/monocyte chemotactic activating factor (MCP-1/MCAF)
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The human homolog of the JE gene encodes a mono
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FEBS Lett. (1989) 244:487-493
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#title Identification of the monocyte chemotactic protein osteosarcoma cells and monocytes: detection of a N-terminally processed form.
#cross-references_MUID:90211336
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p_position 17q11.2-17q12
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##residues 24-28,'Q',30-99 ##label YEQ
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##residues 1-99 ##label LIY
##cross-references GB:S69738; NID:g545464; PID:g545465
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##residues 1-92 ##label
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The expression of monocyte chemotactic protein (Molinar vascular endothelium in vitro and in vivo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F. Chinese J. Microbiol. Immunol. (1994) 14:29-32 The PCR. cloning and sequencing of human monocyte chemoattractant protein-1 (MCP-1) gene.
                                                                                                 Shi, M.M.; Godleski, J.J.; Paulauskis, J.D.
Biochem. Biophys. Res. Commun. (1995) 211:289-295
Molecular cloning and posttranscriptional regulation of
macrophage inflammatory protein-1 alpha in alveolar
macrophages.
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cytokine; glycoprotein; inflammation; pyroglutamic acid
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macrophage inflammatory protein-lalpha - rat
#formal_name Rattus norvegicus #common_name Norway rat
29-May-1998 #sequence_revision 29-May-1998 #text_change
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#modified_site pyrrolidone carboxylic acid
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##cross-references EMBL:X79416; NID:g872312; PID:g872313
##cross-references EMBL:X79416; NID:g872312; PID:g872313
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               Biochem. Biophys. Res. Commun. (1994) 205:148-153
Porcine luteal cells express monocyte chemoattractant
protein-2 (MCP-2): Analysis by cDNA cloning and northern
analysis.
JC2417
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JC2417
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monocyte chemoattractant protein-1 precursor - pig
#formal_name Sus scrofa domestica #common_name domestic pig
30-Sep-1993 #sequence_revision 20-Aug-1994 #text_change
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monocyte chemoattractant protein-2 - pig
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Porcine luteal cells express monocyte chemoattractant
protein-1 (MCP-1): Analysis by polymerase chain rea
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Scheit, K.H.
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#journal DNA Cell Biol. (1991) 10:671-679
#title Gene expression and cDNA cloning identified a major basic protein constituent of bovine seminal plasma as bovine monocyte-chemoattractant protein-1 (MCP-1).
#cross-references MUID:92096117
#accession A39296
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##residues 50-68,'X',70-74,'X',76 ##label WE2
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##experimental_source corpus luteum
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Characterization of the
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#accession JL0088
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#accession C30552
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##cross-references EMBL:X65502; NID:g53126; PID:g53127
This protein is a monokine
                                                                                                                                                                                                                                                                                                                                                                           ##molecule_type protein
##residues 24-33,'XX',36,'X',38 ##label SH2
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cession PS0304
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Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta.
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macrophage inflammatory protein 1-beta - mouse
#400; SIS gamma; T-cell activation protein gamma
#formal_name Mus musculus #common_name house mouse
28-Aug-1989 #sequence_revision 28-Aug-1989 #text_change
20-Mar-1998
                                                                                                                                                                                                                                                                                     Daubersies, P.; Lepretre, F.; Bailleul, B.; Grove, M.; Pragnell, I.; Plumb, M. submitted to the EMBL Data Library, October 1991 Sequence of the murine macrophage inflammatory protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G. J. Immunol. (1989) 142:679-687
A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.
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Davatelis, G.; Wolpe, S.D.;
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26/1; 65/2
*superfamily macrophage inflammatory
#length 99 *molecular-weight 11114
                                                                             glycoprotein
                                                                                         26/1; 64/2 #superfamily macrophage inflammatory protein
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#domain signal sequence #status predicted #label SIG\
#product macrophage inflammatory protein 1-beta #stat
experimental #label MAT\
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Pred. No. 7.
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7.39e-03
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Masiarz, F.; Coit,
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Coit, D.; Cerami,
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Best Local Similarity 72.7%;
Matches 8; Conservative
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Best Local
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Best Local Similarity 66.7%;
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##residues 1-9
                                                                                                                                                                           ##molecule_type mRNA
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                                                                                                                                              ##residues 1-101 ##label ##cross-references GB:S74436;
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                                         Match 77.2%;
Local Similarity 66.7%;
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EVCLDPKEKWVQ 86
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Cloning of a canine gene homologous
interleukin-8-encoding gene.
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JN0841
Ishikawa, J.; Suzuki, S.;
                                                                                                                                                                                                                                    Seow, H.F.; Yoshimura, T.; Wood, P.R.; Colditz, Immunol. Cell Biol. (1994) 72:398-405 Cloning, sequencing, expression and inflammator; skin of ovine interleukin-8.
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#length 95 #molecular-weight 10611
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#formal_name Canis lupus familiaris #common_name dog
19-May-1994 #sequence_revision 19-May-1994 #text_change
                                                                                                                                                                                                                                                                                                                                       146997 #type complete
interleukin-8 - sheep
#formal_name Ovis sp. #common_name sheep
21.Feb-1997 #sequence_revision 21-Feb-1997 #text_change
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                           Score 71; DB 2; Pred. No. 1.15e-02; 1; Mismatches
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Kuijper, J.L.; Forstrom, J.W.; Martin, T.R.
#journal Bicchemistry (1992) 31:10483-10490
#title Molecular cloning of porcine factors I and II; identification porcine IL-8 and another intercrine-alpha protein.
#cross-references MUID:93041741
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(FICATION #superfamily beta-thromboglobulin
#length 101 #molecular-weight 11292 #checksum
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Cordier, G.
submitted to the EMBL Data Library, March 1994
Nucleotide sequence of ovine interleukin 8 cDNI
polymerase chain reaction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     alveolar macrophage chemotactic factor-I (AMCF-I)
interleukin-8 homolog - pig
#formal_name Sus scrofa domestica #common_name domestic pig
30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change
23-Feb-1996
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#common_name domestic sheep
06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
08-Sep-1997
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A53096 #type complete interleukin-8 precursor -
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Pred. No. 1.15e-02;
1; Mismatches 3
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Pred. No. 1.15e-02;
1; Mismatches 3
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IFICATION #superfamily beta-thromboglobulin
#Y #length 103 #molecular-weight 11633 #chec
                                                                                                                                                                                                                                                                                                                                                                                                                                    ##residues 1-125 ##label YOS ##cross-references GB:M57440; NID:g165469; PID:g165470
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##residues 1-12
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Local Similarity 72.7%;
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J. Biol. Chem. (1994) 269:77-85
Regulation of interleukin-8 expression in porcine alveolar
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A53096
               Bartels, J.; Schlueter, C.; Richter, E.; Noso, N.; Kulke, R. Christophers, E.; Schroeder, J.M.
Biochem. Biophys. Res. Commun. (1996) 225:1045-1051
Human dermal fibroblasts express ectaxin: Molecular cloning, mRNA expression, and identification of ectaxin sequence
                                                                                                                             #formal_name Homo sapiens #common_name man
01-Nov-1996 #sequence_revision 01-Nov-1996 #text_change
08-Sep-1997
                                                                                                                                                                                                                                                                                                                                                                                                     #superfamily macrophage inflammatory
#length 125 #molecular-weight 13776
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J. Immunol. (1991) 146:3483-3488
Neutrophil attractant/activation protein-1 and chemoattractant protein-1 in rabbit: cDNA cloexpression in spleen cells.
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monocyte chemoattractant protein-1 - rabbit
#formal_name Oryctolagus cuniculus #common_name domestic
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02-Jun-1995 #sequence_revision 02-Jun-1995 #text_change
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Pred. No. 1.15e-02;
Vismatches 2;
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Pred. No. 1.15e-02;
Wismatches 3;
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rtaugh, M.P.
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Best Local Similarity 66.7%;
Matches 8; Conservative
                                                                             #journal
#title
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#title Molecular cloning of a human monocyte-derived neutrophil chemotactic factor (MDNCF) and the induction of MDNCF m by interleukin 1 and tumor necrosis factor.
#cross-references MUID:88258376
#accession JL0041
promyelocytes. #cross-references MUID:89313739
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#accession A37034
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##cross-references GB:M28130; NID:g186367; PID:g186368
##note the authors failed to translate the last thirty-six
nucleotides of the second exon
                                                                                                                                                                                                                                                                              ##molecule_type mRNA
#residues 1-99 ##label MA1
##cross-references EMBL:Y00787; NID:g34518; PID:g34519
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##experimental_source dermal fibroblast
This protein has eosinophil specific chemotatic activity.
FICATION #superfamily macrophage inflammatory protein
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interleukin-8 precursor - human
beta-thromboglobulin-like protein; fibroblast-derived
neutrophil-activating factor alpha; lung carcinoma-derived
chemotaxin; lymphocyte-derived neutrophil-activating
factor; monocyte-derived neutrophil chemotactic factor;
monocyte-derived neutrophil factor
#formal_name Homo sapiens #common_name man
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J. Immunol. (1989) 143:1366-1371
Genomic structure of the human monocyte-derived neutrophil chemotactic factor IL-8.
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#product eotaxin #status predicted #label MAT
#length 97 #molecular-weight 10790 #checksum 448
                                          Kowalski, J.; Denhardt, D.T.
Mol. Cell. Biol. (1989) 9:1946-1957
Molation of the mRNA for monocyte-derived
neutrophil-activating peptide in differentiating HL60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matsushima, K.; Morishita, K.; Yoshimura, T.; Lavu, S.; Kobayashi, Y.; Lew, W.; Appella, E.; Kung, H.F.; Leonard.
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                                                                                                                                                                           the sequence shows similarity to several platelet-derived factors, a v-src-induced protein, a growth-regulated gene product (gro), and an IFN-gamma-inducible protein
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Pred. No. 1.80e-02;
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#title II-lalpha or tumor necrosis factor-alpha stimulate release of three NAP-1/II-8-related neutrophil chemotactic proteins in #cross-references MUID:90187866

#accession A60401
          #journal
#title
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#title
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#journal Biochem. Biophys. Res. Commun. (1987) 149:755-761
#title Purification and amino acid sequencing of NAF, a novel
neutrophil-activating factor produced by monocytes.
#cross-references MUID:88106502
#accession A27488
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#cross-references MUID:88162914
#accession A28598
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#title purification and partial primary sequence of a chemotactic protein for polymorphonuclear leukocytes derived from human lung giant cell carcinoma LU65C cells.
#cross-references MUID:89279141
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##residues 23-32 ##label SCH
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a minor component of this material (15%) includes
additional two amino acids at the amino end
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##restidues 23-32,'xx',35,'x',37-52,'L',54 ##label
##resperimental_source lung giant cell carcinoma LU65C
##comparison A28598
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Blochem. Blophys. Res. Commun. (1988) 151:883-890
Structure determination of a human lymphocyte derived
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Van Damme, J.; Decock, B.; Conings, R.; Lenaerts, J.P.;
Opdenakker, G.; Billiau, A.
Eur. J. Immunol. (1989) 19:1189-1194
The chemotactic activity for granulocytes produced by virally
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Appella, E.; Oppenheim, J.J.; Leonard, E.J. Proc. Natl. Acad. Sci. U.S.A. (1987) 84:9233-9237 Purification of a human monocyte-derived neutrophil chemotactic factor that has peptide sequence similarity to other host defense cytokines.
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##molecule_type protein
21-33,'X',35,'X',37-47 ##label YO2
##residues 21-33,'X',35,'X',37-47 ##label YO2
##note 10-31, 23, and
##note represented 8%, 47%, and 45%, respectively,
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##residues 28-99 ##label CAR
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##residues 23-46 ##label GOL
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##residues 28-47 ##label VA3
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                                                                                                                                            Golds, E.E.; Mason, P.; Nyirkos, P.
Blochem. J. (1989) 259:585-588
Inflammatory cytokines induce synthesis and secretion of protein and a neutrophil chemotactic factor but not beta-2--microglobulin in human synovial cells and
                                                                                                                                                                                                                                                                                                                                                               Car, B.D.; Baggiolini, M.; Walz, A. Biochem. J. (1991) 275:581-584 Formation of neutrophil-activating peptide 2 from platelet-derived connective-tissue-activating peby different tissue proteinases.
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A novel, NH-2-terminal sequence-characterized human monokine possessing neutrophil chemotactic, skin-reactive, and
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Three forms of monocyte-derived neutrophil chemotactic factor (MDNCF) distinguished by different lengths of the amino-terminal sequence.
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Purification of granulocyte chemotactic peptide/interleukin-8
reveals N-terminal sequence heterogeneity similar to that
of beta-thromboglobulin.
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macrophage inflammatory protein-1-alpha precursor - mouse
heparin-binding chemotaxis protein; L2G25B protein;
SCI/MIP-la; SIS alpha; stem cell inhibitor/macrophage
inflammatory protein 1-alpha; T-cell activation protein
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Coding region structure of interleukin-8 gene of human lung
giant cell carcinoma Lu65C cells that produce
LUCT/interliukin-8: homogeneity in interleuki-8 genes.
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P.; Van Aelst, I.; Van Damme, J.; Opdenakker, G.
Biochem. Biophys. Res. Commun. (1997) 231:726-730
Human monocyte chemotactic protein-2: cDNA cloning and
Grove, M.; Lowe, S.; Graham, G.; Pragnell, Nucleic Acids Res. (1990) 18:5561
                                                                                                                                                             #formal_name Mus musculus #common_name house mouse 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_ci
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#formal_name Homo sapiens #common_name man
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predicted #label MAT
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#product monocyte chemotactic protein-2 #status
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Pred. No. 1.80e-02;
2; Mismatches 2
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#title
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #authors Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G. #journal J. Immunol. (1989) 142:679-68; **
#title A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.

#cross-references_MUID:89093958
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        #journal
                                                                                                                                                                                      #cross-references MUID:89067830 #accession PS0303
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#accession S04533
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#journal Proc. Natl. Acad. Sci. U.S.A. (1989) 86:1963-1967
#title cDNA sequence of two inducible T-cell genes.
#cross-references MUID:89184547
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##cross-references EMBL:X53372; NID:g54062; PID:g297531
##note the authors' translation of the nucleotide sequence
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##cross-references EMBL:X12531; NID:g53122; PID:g53123
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Cloning and characterization of a CDNA for murine macrophage inflammatory protein (MIP), a novel monokine with inflammatory and chemokinetic properties.
Wolpe, S.D.; Davatelis, G.; Sherry, B.; Beutler, B.; Hesse, D.G.; Nguyen, H.T.; Moldawer, L.L.; Nathan, C.F.; Lowry, S.F.; Cerami, A. J. Exp. Med. (1988) 167:570-581
                                                                                                                                                                                                                                      J. Exp. Med. (1988) 168:2251-2259
Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta.
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                                                                                                                                                                                                                                                                                                                                                                         Sherry, B.; Tekamp-Olson, P.;
Davatelis, G.; Wolpe, S.D.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the sequence has been corrected in reference A53885
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Coit, D.; Merryweather,
                                                                                                                                                                                                                                                                                                                                                                      Gallegos, C.; Bauer
Masiarz, F.; Coit,
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Coit, D.; Cerami,
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Best Local Similarity 66.7%;
                                                       #authors Beaublen, B.C.; Collins, P.D.; Jose, P.J.; Totty, N.F.;

#suan, J.; Waterfield, M.D.; Williams, T.J.

Biochem. J. (1990) 271:797-801

#title A novel neutrophil chemoattractant generated during an inflammatory reaction in the rabbit peritoneal cavity vivo. Purification, partial amino acid sequence and structural relationship to interleukin 8.

#cross-references MUID:91058518
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##cross-references GB:M73061; NI
This protein is a monokine.
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J. Immunol. (1991) 146:4031-4040
Genomic structure of murine macrophage inflammatory
protein-1-alpha and conservation of potential regulatory
sequences with a human homolog, LD78.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  146871 #type complete interleukin-8 - rabbit neutrophil attractant/activation protein-1
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J. Immunol. (1991) 146:3483-3488
Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and
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23-33,'X',35,'X',37-46,'X',48-49,'I',51-53 ##label BEA
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ENTRY
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                                                                 SUMMARY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
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KEYWORDS
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Best Local Similarity 66.7%;
Matches 8; Conservative
   Query Match
                                                                                                                             1-23
24-96
93
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#title Constitutive and allergen-induced expression of eotaxin mRNA
#cross-references MUID:95173589
#accession 148099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #journal
#title
                                                                                                                                                                                                                                                                                                                                                                                                                                 #accession
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ##sterus
##olecule_type mRNA
##cesidues 1-96 ##label RES
##residues 1-96 ##label RES
##cross-references EMBL:U18941; NID:g687655; PID:g687656
                                                                                                                                                                                                                                                 ##molecule_type mRNA
##residues 1-96 ##label JOS
##cross-references EMBL:X77603; NID:g602551; PID:g602552
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Local Similarity 72.7%;
hes 8; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ICADPSEEWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jose, P.J.; Adcock, I.M.; Griffiths-Johnson, D.A.; Berkman, N.; Wells, T.N.C.; Williams, T.J.; Power, C.A.
Biochem. Biophys. Res. Commun. (1994) 205:788-794
Eotaxin: Cloning of an eosinophil chemoattractant cytokine and increased mRNA expression in allergen-challenged
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       148099 #type complete
eotaxin precursor - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
09-May-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #superfamily beta-thromboglobulin
cytokine
#length 101 #molecular-weight 11402 #checksum 1085
                                                                                                                                                                                                                                                                                                                                                                                                                              guinea-pig lungs. JC2478
                                                                                                                                                                                                                                              glycoprotein
                                                                 #length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #formal_name Rattus norvegicus #common_name Norway rat
21-Feb-1995 #sequence_revision 05-Apr-1995 #text_change
08-Sep-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              eotaxin - rat
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                                                                                                                 #domain signal sequence #status predicted #label SIG\
#product eotaxin #status predicted #label MAT\
#binding_site carbohydrate (Thr) (covalent) #status
                                                                 96
   72.8%;
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                                                           #molecular-weight 10695 #checksum 7329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 68; DB 2; L
Pred. No. 4.33e-02;
1; Mismatches 3
Score 67; DB 2;
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Pred. No. 6.70e-02;
0; Mismatches 3
Length 96;
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Search completed: Thu Apr 1 07:40:34 1999
Job time: 14 secs.

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Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

Run on: MPsrch_pp protein - protein database search, using Smith-Waterman algorithm Thu Apr 1 07:39:00 1999;

iabular output not generated. MasPar time 2.30 Seconds 139.843 Million cell updates/sec

Description: Perfect Score: Sequence: Scoring table: Title: РАМ 150 Gap 15 >US-08-927-939-12 (1-12) from US08927939.pep 92 1 EICADPSEEWVQ 12

Searched: 74019 seqs, 26840295 residues

Post-processing: Minimum Match 0% Listing first 100 summaries

Database: swiss-prot36 1:swissprot

Statistics: Mean 25.534; Variance 34.572; scale 0.739

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Score			
	Match	Query	æ	
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1	B			
1	Ü			S
. 4	Description			SUMMARIES
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Result No.	Score	Query Match	% Query Match Length DB	ID	Description	Pred. No.
1	87	94.6	92 1	MIlA_HUMAN	MACROPHAGE INFLAMMATOR	5.77e-07
2	87	94.6	93 1	MI10_HUMAN	TONSILLAR LYMPHOCYTE L	5.77e-07
ω	82	89.1	148 1	MCP1_RAT	MONOCYTE CHEMOTACTIC P	8.23e-06
4	80	87.0	92 1	MI1B_HUMAN	MACROPHAGE INFLAMMATOR	2.34e-05
v	80	87.0	98 1	MCP4_HUMAN	MONOCYTE CHEMOTACTIC P	2.34e-05
6	80	87.0	99 1	MCP3_HUMAN	MONOCYTE CHEMOTACTIC P	2.34e-05
7	78	84.8	120 1	MCP1_CAVPO	CHEMOTACTIC	6.60e-05
œ	78	84.8	148 1	MCP1_MOUSE	CHEMOTACTIC	6.60e-05
9	77	83.7	92 1	MI1B_RABIT	MACROPHAGE INFLAMMATOR	1.10e-04
10	77	83.7	99 1	MCP1_HUMAN	MONOCYTE CHEMOTACTIC P	1.10e-04
: ::	77	83.7	101 1	MCP1_CANFA	MONOCYTE CHEMOTACTIC P	1.10e-04
12	76	82.6	90 1	MI1B_CHICK	MACROPHAGE INFLAMMATOR	1.84e-04
13	76	82.6	92 1	MI1A_RAT	MACROPHAGE INFLAMMATOR	1.84e-04
14	76	82.6	99 1	MCP1_PIG	MONOCYTE CHEMOTACTIC P	1.84e-04
15	74	80.4	74 1	MCPB_BOVIN	MONOCYTE CHEMOTACTIC P	5.06e-04
16	74	80.4	92 1	MI1B_RAT	MACROPHAGE INFLAMMATOR	5.06e-04
17	74	80.4	99 1	MCP2_PIG	MONOCYTE CHEMOTACTIC P	5.06e-04
24	74	80.4	99 1	MCP2_BOVIN	MONOCYTE CHEMOTACTIC P	5.06e-04
19	73	79.3	97 1	EOTA_RAT	EOTAXIN PRECURSOR (EOS	8.35e-04
20	73	79.3	97 1	EOTA_MOUSE		8.35e-04
21	73	79.3	104 1	MCP5_MOUSE	н	8.35e-04
22	72	78.3	89 1	MIP4_HUMAN	MACROPHAGE INFLAMMATOR	1.38e-03
23	72	78.3	97 1	EOTA HUMAN	EOTAXIN PRECURSOR (FOS	1.386-03

77177777777777777777777777777777777777	72 71 71 71
77777777777777777777777777777777777777	78.3 77.2 77.2 77.2 77.2
103 125 99 99 99 99 99 91 101 101 101 101 101 1	99 92 93 101
ILB_PIG CCC3_HUMAN MCP1_RABIT MCP2_HUMAN ILB_BOUND ILB_CCRTO ILB_BOUND ILB_CCRTO ILB_CAVPO ILB_CCAVPO ILB_CCAV	MCPA_BOVIN MI1B_MOUSE CCC1_HUMAN IL8_SHEEP IL8_CANFA
CHEMOKINE CC-3 PRECURSO CHEMOKINE CC-3 PRECURSO MONOCYTE CHEMOTACTIC P MONOCYTE CHEMOTACTIC P MONOCYTE CHEMOTACTIC P INTERLEUKIN-8 PRECURSO MACROPHAGE INFERLEUKIN-8 PRECURSO INTERLEUKIN-8 PRECURSO EDTAXIN PRECURSO ENTERLEUKIN-8 PRECURSO ENTERLEUKIN-8 PRECURSO ENTERLEUKIN-8 PRECURSO ENTERLEUKIN-8 PRECURSO ENTERLEUKIN-8 PRECURSO ENTERLEUKIN-8 PRECURSOR C10 PROTEIN PRECURSOR C10 PROTEIN PRECURSOR C10 PROTEIN PRECURSOR C10 PROTEIC RANTES T-CELL SPECIFIC RANTES T-CHUCTOSE GLYCOPROTEIN POLYPROTE GLYCOPROTE	MONOCYTE CHEMOTACTIC P MACROPHAGE INFLAMMATOR CHEMOKINE CC-1 PRECURSO INTERLEUKIN-8 PRECURSO INTERLEUKIN-8 PRECURSO
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TRESULT ACCORDED TO THE RESULT ACCORDED TO TH
                        В
                                                               Matches
                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                               -!- SIMILARITY: LD78-ALPHA AND -B
-!- SIMILARITY: BELONGS TO THE IN
CC) (CHEMOKINE CC).

EMBL; D00044; D100046; -.

EMBL; M23452; G188559; -.

EMBL; M25315; G602453; -.

EMBL; X03754; G758089; -.

EMBL; X03754; G758089; -.

EMBL; X03178; G182847; -.

EMBL; M23178; G182847; -.

EMBL; M23178; G182847; -.

EMBL; M23178; G182847; -.

EMBL; D9014; G219906; -.

PIR; A24198; A24198.

PIR; A30574; A30574.

HSSP; P132286; 1HUM.
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DISULFID
SEQUENCE
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P10147;

01-MAR-1989 (REL. 10, CREATED)

01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)

01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)

MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA)

(TONSILLAR LYMPHOCYTE LD78 ALPHA PROTEIN) (GOS19-1 PROTEIN) (SIS-BETA)

(PAT 464.1) (SMALL INDUCIBLE CYTOKINE A3).
                                                                                                                                                                                                                                  SIGNAL
                                                                                                                                                                                                                                                                                                       MIM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
MEDLINE; 91103879.
BLUM S., FORSDYKE R.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
MEDLINE; 90287155.
NAKAO M., NOMIYAMA H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. MEDLINE; 89140347.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
MEDLINE; 86223879.
OBARU K., FUKUDA M., MAEDA S.,
J. BIOCHEM. 99:885-894(1986).
                                                                                                                                                                                                                                                          CYTOKINE;
                                                                                                                                                                                                                                                                              PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA CELL BIOL.
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                      71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AO M., NOMIYAMA H., SHIMADA K.;

CELL. BIOL. 10:3646-3658(1990).

FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.

INDUCTION: BY TPA OR PHA (TPA = 12-O-TETRADECANOYL PHORBOL-13

ACETATE (TUMOR PROMOTER); PHA = PHYTOHEMAGGLUTININ (T-CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MITOGEN)
QVCADPSEEWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5050
                                                                                   Similarity
                                                                  10;
                                                                                                                                                                                                                              PS00472; SMALL_CYTOKINES_CC; 1.
; CHEMOTAXIS; INFLAMMATORY RESPONSE;
potential_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .F., BALKE J., IRVING S
DL. 142:1582-1590(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       54.3
54.3
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23
33
34
3A,
                                                                                                                                                   92
                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     YKE R.E., FORSDYKE
9:589-602(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       398
563
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                                                                                                                                                   MW;
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GUNB_CLOTM
EX5B_ECOLI
ABL2_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ALIGNMENTS
                                                         Score 87; DB 1; 1
Pred. No. 5.77e-07;
2; Mismatches (
                                                                                                                                               MACROPHAGE INFLAMMATORY
BY SIMILARITY.
BY SIMILARITY.
C24DD919 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -BETA ARE VERY CLOSELY RELATED.
INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SHIMADA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             D.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KELLY
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ENDOGLUCANASE B PRECUR
EXODEOXYRIBONUCLEASE V
TYROSINE-PROTEIN KINAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ۲.,
                                                                                                                                                                                                                                                        SIGNAL
                                                             0,
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                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MAMMALIA;
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                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 10; Consei
                                   MCP1_RAT STANDARD; PRT; 148 AA P14844; 01-APR-1990 (REL. 14, CREATED) 01-APR-1990 (REL. 14, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDAT MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (M SERUM-RESPONSIVE JE PROTEIN). SCYAZ OR JE OR MCP1. RATTUS NORVEGICUS (RAT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MI10_HUMAN
P16619;
01-AUG-1990
01-AUG-1990
01-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHAIN
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE MEDLINE; BLUM S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TONSILLAR LYMPHOCYTE LD78 BETA (PAT 464.2).
SCYA3LL OR 464.2.
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PIR;
PIR;
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PIR;
                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 90287702.
IRVING S.G., EIRFEL P.F., BALKE J., MCBRIDE BURD P.R., SIBBENLIST U., KELLY K.;
NUCLEIC ACIDS RES. 18:3261-3270(1990).
                RATTUS NORVEGICUS (RAT).
EUKARYOTA; METAZOA; CHOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HSSP; P13236;
MIM; 601395;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. MEDLINE; 90287155. NAKAO M., NOMIYAMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2
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                                                                                                                                                                                                                                                                                                                       72 QVCADPSEEWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R; B30908; B30908.
R; B30412; B30412.
R; B35673; B35673.
R; S10157; S10157.
                                                                                                                                                                                                                                                                                EICADPSEEWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EICADPSEEWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E FROM N.A.
; 91103879.
; FORSDYKE R.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PS00472; SMALL_CYTOKINES_CC; CHEMOTAXIS; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BIOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90 (REL. 15, CAREATED)
90 (REL. 15, LAST SEQUENCE UPDATE)
97 (REL. 35, LAST ANNOTATION UPDATE)
LYMPHOCYTE LD78 BETA PROTEIN PRECUR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIMATES.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MA H., SHIMADA K.;
10:3646-3658(1990).
464.1 AND 464.2 ARE VERY CLOSELY RELATED.
BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                  12
                                                                                                                                                                                                                                                                                                                     83
                                                                                                                                                                                                                                                                                                                                                                                                                                         23
93
58
74
10161 MW;
                                                                                                                                                                                                                                                                                                                                                                                 94.6%;
                  CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FORSDYKE D.R.;
                                                                                                                                                                                                                                                                                                                                                                               Score 87;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                         LD78 BETA / G0S19-2 /
BY SIMILARITY.
BY SIMILARITY.
; 21EDDB04 CRC32;
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                    VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                 87; DB 1; 1
No. 5.77e-07;
                                                                                             3 UPDATE)
ION UPDATE)
CURSOR (MCP-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93
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                    TETRAPODA; MAMMALIA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  O.W.,
                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                   (IMMEDIATE-EARLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (G0S19-2 PROTEIN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MORTON C.
                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   464.2
                                                                                                                                                                                                                                                                                                                                                                                                      93;
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                                                                                                                                                                                                                                                                                                                                                            0;
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RESULT AND SEED OF SEE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
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Best Local Similarity 83.3%;
Matches 10; Conservative
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EMBL; X17053; G55531; -.

EMBL; M57441; G205334; -.

PIR; JN0128; JN0128

PIR; S07723; S07723.
                                                                                        SEQUENCE FROM N.A.
MEDLINE; 89093958.
BROWN K.D., ZURAWSK
J. IMMUNOL. 142:679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (1)
SEQUENCE FROM N.
STRAIN-WAG/RIJ;
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DISULFID
CARBOHYD
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MILB_HUMAN STANDARD; PRT; 92 AA.

P13236; P22617; Q13704;
O1-JAN-1990 (REL. 13, CREATED)
O1-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)
O1-NOV-1997 (REL. 13, LAST SEQUENCE UPDATE)
O1-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA PRECURSOR (MIP-1-BETA) (T-CELL ACTIVATION PROTEIN 2) (ACT-2) (PAT 744) (H400) (SIS-GAMMA) (LYMPHOCYTE ACTIVATION GENE-1 PROTEIN) (LAG-1) (HC21) (SNALL INDUCIBLE CYTOKINE AA) (G-26 T LYMPHOCYTE-SECRETED PROTEIN).
SEQUENCE;
                                                                                                                                                                                                                                                                                              MEDLINE;
ZIPFEL P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CYTOKINE;
SIGNAL
CHAIN
                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. MEDLINE; 89140347.
                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
MEDLINE; 89071764.
LIPES M.A., NAPOLITANO
PROC. NATL. ACAD. SCI.
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BIOCHEM. BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE: 90174947.
TIMMERS H.T.H.M., PRONK G.J.,
NUCLEIC ACIDS RES. 18:23-34(19)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HOMO SAPIENS (HUMAN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOD_RES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73 EICADPNKEWVQ 84
                                                                                                                                                                                                                                                            PEEL P.F., BALKE J., IRVING S. IMMUNOL. 142:1582-1590(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -ب
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CHEM. BIOPHYS. RES. COMMUN. 174:504-509(1991).
FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUBUNIT: MONOMER OR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NEUTROPHILS
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91061800.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 34
35
126
148
                                                                                            ZURAWSKI S.M., MOSMANN T.R., 142:679-687(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1MCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-KIDNEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     148
24
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75
126
16460
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TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ₹
                                                                                                                                                                                                                                                                                                                                                                                                                      JEANG K.-T., CHANG N.T.,
A. 85:9704-9708(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 82;
Pred. No.
1; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL.
DB97F97C CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PYRROLIDONE CARBOXYLIC SIMILARITY). BY SIMILARITY. BY SIMILARITY.
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                                                                                                                                                                                                                                                                                        S.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                           KELLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1; L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VAN DER EB
                                                                                                                          ZURAWSKI G.;
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                                                                                                                                                                                                                                                                                           SIEBENLIST
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>;</u>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        LEONARD W.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BUT
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Query Match
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EMBL; M25316; G602455; -.
EMBL; M25316; G602455; -.
EMBL; X53683; G34218; -.
EMBL; X53683; G34218; -.
EMBL; X53682; E35870; ALT_SEQ.
EMBL; X16166; G32036; -.
EMBL; M69201; G1332376; -.
EMBL; M69202; G1332376; JOINED.
EMBL; M69202; G1332376; -.
                 HELIX
SEQUENCE
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PDB; 1HUM; 30
PDB; 1HUN; 30
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[7]
                                           STRAND
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                                                                                                                                                                                                                                                  PIR;
                                                                                                                                                                                                                                                                    PIR;
                                                                                                                                                                                                                                                                           PIR;
                                                                                                                                                                                                                                                                                                                                                                                                                    LODI P.J., GARRETT D.S., KUSCEWSKI J.,
LEONARD W.J., GRONENBORN A.M., CLORE G.
SCIENCE 263:1762-1767(1994).
                                    TURN
                                                                                                                                                                                                                                                           PIR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE; 91373378.
NAPOLITANO_M., MODI W.S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 89325421.
CHANG H.C., REINHERZ E.L.;
EUR. J. IMMUNOL. 19:1045-1051(1989).
                                                                                                                                                                                      SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRUCTURE BY NMR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MILLER M.D., HATA S., WAAL MALEFYT R., J. IMMUNOL. 143:2907-2916(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 6-92 FROM N.A. MEDLINE; 90038522.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. MEDLINE; 91373378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-T-CELL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LEONARD W.J.;
                                                                                                                                                                                                                                                                                                                                                                                                              -!- FUNCTION: MONOKINE WITH INFLAMMATORY AND
                                                                                                                                                                                                                                                                                                                                                                                                     !- SUBUNIT: HOMODIMER
                                                                                                                                                                                                                                                                                                                                                                                            !- INDUCTION: BY MITOGENS
                                                                                                                                                                                                                                                                                                                                                                                     SIMILARITY: BELONGS
                                                                                                                                                                                                                       1HUM; 30-APR-94.
1HUN; 30-APR-94.
                                                                                                                                                                                                                                                                    B30574;
                                                                                                                                                                                                                                                                                                                                                                          (CHEMOKINE CC).
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                                                                                                                                                                                              CHEMOTAXIS;
                                                                                                                                                                                                                                                                                            66; G32036; -. 03; G1332376; -. 01NED. 01; G1332376; JOINED. 02; G1332376; JOINED.
                                                                                                                                                                                                                                                         A31767.
B30574.
D30552.
                                    A37411
                                                                                                                                                                                             SMALL_CYTOKINES_CC;
XIS; INFLAMMATORY RES
                  10212
87.0%;
                                            7653
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                  MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CEVARIO S.J.,
                                                                                                                                                                                                                                                                                                                                                                                    THE
Score 80;
                                                                                             T -> C (IN REF. )
A -> S (IN REF. )
P -> L (IN REF. )
ARKLPR -> REASS |
S -> I (IN REF. )
S -> G (IN REF. )
S -> T (IN REF. )
                                                                                                                                                 MACROPHAGE INFLAMMATORY
BY SIMILARITY.
BY SIMILARITY.
T -> C (IN REF. 7).
                  F18E7AFD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                    INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                            RESPONSE; SIGNAL; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                               TSANG M.L.S., WEATHERBEE J.A., .M.;
DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KRANGEL M.S.;
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6).
7).
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Length 92;
                                                                                                                         REF.
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                                                                                                                                                                             PROTEIN 1-BETA
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TRESULTATION OF THE SULTATION OF THE SUL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q99616;
15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 4 PRECURSOR (MCP-4) (MONOCYTE CHEMOATTRACTANT PROTEIN 4) (CK-BETAIO) (NCC-1).
SCYA13 OR MCP4 OR NCC1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 97341179.

BERKHOUT T.A., SARAU H.M., MOORES K., WHITE J.R., ELSHOURBAGY N., APPELBAUM E., REAPE T.J., BRAWNER M., MAKWANA J., FOLEY J.J., SCHMIDT D.B., IMBURGIA C., MACNULTY D., MATTHEWS J., O'DONNELL K., O'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPHEE C.; J. BIOL. CHEM. 272:16404-16413(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MCP4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DANTE M., GIBSON A.;
SUBMITTED (AUG-1997)
-i- FUNCTION: CHEMOTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GARCIA-ZEPEDA E.A., COMBADIERE C., LAVIGNE F., HAMID Q., MURPHY P.M., J. IMMUNOL. 157:5613-5626(1996).
                                                EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EUKARYOTA;
                                                                                                 EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE=FET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE; 96235049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 97113354.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HOMO SAPIENS (HUMAN)
                                                                                      -!- MASS SPECTROMETRY: MW-9314; MW_ERR=30; METHOD=MALDI; RAN
-!- MASS SPECTROMETRY: MW-8575; MM_ERR=30; METHOD=MALDI; RAN
-!- MASS SPECTROMETRY: MW-8575; MM_ERR=30; METHOD=MALDI; RAN
-!- INDUCTION: BY INTERLEUKIN-1 AND TNF-ALPHA.
-!- TISSUE SPECIFICITY: WIDELY EXPRESSED. FOUND IN SMALL INT
-!- THYMUS, COLON, LUNG, TRACHEA, STOMACH AND LYMPH NODE. LO
SEEN IN THE PULMONARY ARTERY SMOOTH MUSCLE CELLS.
-!- THIS PROTEIN CAN BIND HEPARIN.
-!- PTM: ONE MAJOR ISOFORM MCP-4, AND TWO MINOR ISOFORMS (LA
(FNPQGLA)MCP-4 ARE PRODUCED BY DIFFERENTIAL SIGNAL CLEAV
(LA)MCP-4 IS ABOUT 30 FOLD LESS ACTIVE THAN MCP-4.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL
EMBL; C46) (CHEMOKINE CC).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                        MITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCY
BASOPHILS AND EOSINOPHILS, BUT NOT NEUTROPHILS SIGNALS THROUG
CCR2B AND CCR3 RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF
LEUKOCYTES AT BOTH SIDES OF ALLERGIC AND NONALLERGIC INFLAMMAT
MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTER
WALL DURING THE DISEASE PROCESS OF ARTHEROSCLEROSIS. MAY PLAY
ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED
EXOGENOUS PATHOGENS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                _HUMAN
                                                   ; AC002482; G2340091;
601391; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                            PS00472;
     CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   , LOETSCHER P., FORSSMANN ER B., GAROTTA G., THELEN 183:2379-2384(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             arity 75.0%;
Conservative
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SMALL_CYTOKINES_CC; 1.
KIS; SIGNAL; GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AND
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LUSTER A.D.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEWALD B.,
BAGGIOLINI
  INFLAMMATORY RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . . .
E.,
                                                                                                                                                    FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHRONICALLY EXPOSED TO
                                                                                                                                                                                               ISOFORMS (LA)MCI
SIGNAL CLEAVAGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
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                                                                                                                                                                                                                         (LA)MCP-4
                                                                                                                                                                                                                                                                                                 INTESTINE,
LOW LEVELS
                                                                                                                                                                                                                                                                                                                                                                                               RANGE=17-98
RANGE=22-98
                                                                                                                                                                                                                                                                                                                                                                      RANGE=24-98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LYMPHOCYTES,
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Best Local S
Matches 1
                  MEDLINE: 97263733.

A MEDUNIER S., BERNASSAU J.-M., GUILLEMOT J.-C., FERRARA P., DA MEUNIER S., BERNASSAU J.-M., GUILLEMOT J.-C., FERRARA P., DA MEUNIER S., BERNASSAU J.-M., GUILLEMOT J.-C., FERRARA P., DA BIOCHEMISTRY 36:4412-4422(1997).

C -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES ANT EOSINOPHILS, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE ANTIC ACTIVITY. ALSO INDUCES THE RELEASE OF GELATINASE B. THIS CAN BIND HEPARIN.

C -!- SUBUNIT: MONOMER.

C -!- SUBUNIT: MONOMER.

C -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL C-C.) (CHEMOKINE CC).
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CHAIN
MOD_RES
DISULFID
DISULFID
                                                                                                                                                                                                                                                                      MEDLINE; >>>> P. GUILLEMUL ....
MINTY A., CHALON P., GUILLEMUL C., RAM
MAGAZIN M., MILOUX B., MINTY C., RAM
SHIRE D., FERRARA P., CAPUT D.;
SHIRE D., FERRARA P., CAPUT D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             P80098;
01-DEC-1992
01-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CARBOHYD
SEQUENCE
 EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SCYA7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (MCP-3)
                                                                                                                                                                                                                                                                                                                                                                 OPDENAKKER G., FITEN LAUREYS G., VAN DAMMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHEMOATTRACTANT PROTEIN 3) (NC28)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MCP3_HUMAN
                                                                                                                                                            STRUCTURE BY NMR, AND MEDLINE; 97053697.
KIM K.-S., RAJARATHNAN FEBS LETT. 395:277-28;
                                                                                                                                                                                                             MEDLINE; 92308855.
VAN DAMME J., PROOST P., LENAERTS
J. EXP. MED. 176:59-65(1992).
                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE; 93305913.
                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                     BIOCHEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                OPDENAKKER
                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A., MEDLINE; 93213290.
                                                                                                                                       STRUCTURE BY NMR
                                                                                                                                                                                                                                               TISSUE=OSTEOSARCOMA;
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10; Conser
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                                                                                                                                                                                                                                                                                                                                                      3., VAN DAMME J.;
21:403-408(1994).
           (CHEMOKINE CC).
2308; G313708; ALT_INIT.
                                                                                                                                                            395:277-282(1996).
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                                                                                                                                                                      RAJARATHNAM K.,
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NOT_ANNOTATED_CDS
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., MINTY C., RAMOND P.,
CAPUT D.;
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                                                                                                                                                                                           SUBUNIT.
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                                                                                                                                                                       CLARK-LEWIS
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Pred. No. 2.34e-05;
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DF52F6EC
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PYRROLIDONE CARBOXYLIC
BY SIMILARITY.
BY SIMILARITY.
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                                                                                                                                                                       SYKES B.
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PA N., LUP
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                                (SMALL
                                                                          ANTI-TUMOR
THIS PROTEIN
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Best Local
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Best Local
                                                                                                       Matches
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PIR; S32222; S32222.
PIR; A54678; A54678.
                                                                                                                                                                                                                                       DISULFID
DISULFID
CARBOHYD
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CHAIN
MOD_RES
DISULFID
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CARBOHYD
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Q08782;
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                                                                                                                                                                                                                                                                                                                                                                       CHAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAVIA PORCELLUS (GUINEA PIG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHEMOATTRACTANT PROTEIN-1).
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01-NOV-1995 (REL. 32,
15-JUL-1998 (REL. 36,
MONOCYTE CHEMOTACTIC F
                                                                                                                                                                                                                 SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                      SIGNAL
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-i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC.) (CLEMOKINE CC).
-EMBL; L04985; G349821; -.
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                           71 EVCADPTQKWVQ 82
                                                                                                                                Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NEUTROPHILS.
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FUNCTION: CHEMOTACTIC FACTOR THAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAVPO
EICADPSEEWVO
                                                                                                       Similarity 66.7% 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity 75.0%, 9; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                               CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99
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75.0%;
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, LAST SEQUENCE UPDATE)
, LAST ANNOTATION UPDATE)
, LAST ANNOTATION UPDATE)
PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
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Pred.
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22FAD257 CRC32;
                                                                                                                                                                                                                                                             BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                  PYRROLIDONE CARBOXYLIC ACID (BY SIMILARITY).
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MISSING (IN REF. 4).
7502E19C CRC32;
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PYRROLIDONE CARBOXYLIC
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                          MONOCYTE CHEMOTACTIC PROTEIN 1.
                                                                                                                                                                                                                                                                                                                                                                                                   BY SIMILARITY
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                                                                                                                                                                                                                                                                                                                                                                                                                            INFLAMMATORY RESPONSE;
                                                                                                    re 78; DB 1; Long 1. No. 6.60e-05; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
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    GLYCOPROTEIN; SIGNAL;

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTRACTS MONOCYTES,
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2.34e-05;
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                                                                                                                                                   Length 120;
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SSEEDEDER
       SULT

) MIB_RABIT

C P46632;

C P46632;

T 01-NOV-1995 (REL. 32, CREATED)

DT 01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)

DT 01-CCT-1996 (REL. 34, LAST ANNOTATION UPDATE)

MACROPHAGE INFLAMMATORY PROTEIN 1-BETA PRECURSOR (M)

MACROPHAGE INFLAMMATORY PROTEIN 1-BETA PRECURSOR (M)
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                                                                                                                                                                                                                                                                                   Query Match
Best Local s
Matches
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EMBL; M19681; G387168
PIR; A30209; A30209.
PIR; A30861; A30861
PIR; S16226; S16226.
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P10148;
01-MAR-1989
                                                                                                                                                                                                                                               DISULFID
DISULFID
CARBOHYD
SEQUENCE
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CYTOKINE;
                                                                                                                                                                                                                                                                                                       CHAIN
MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GROWTH FACTOR-INDUCIBLE PROTEIN JE).
SCYA2 OR MCP1 OR JE.
MUS MUSCULUS (MOUSE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAR-1989 (REL. 10, GREATED)
01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (PLATELET-DERIVED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VAN DAMME J., DECOCK B., BERTINI R., PUT W., OPDENAKKER G., MANTOVANI A.; EUR. J. BIOCHEM. 199:223-229(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE; 89093129.
KAWAHARA R.S., DEUEL T.F.;
J. BIOL. CHEM. 264:679-682(1989).
 ORYCTOLAGUS CUNICULUS (RABBIT)
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                        MGD; MGI:98259; SCYA2
PROSITE; PS00472; SMA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                            -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- INDUCTION: BY PLATELET-DERIVED GROWTH FACTOR.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 8823
ROLLINS B.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE; 89093129.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                 SIGNAL
                                                                                                                                                                                                                                                                                                                                                                               HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE OF 26-42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROC. NATL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          · 1 - FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS
                                                                                                                                                                              73
                                                                                                                                                                                                                                                                                                                                                                                                                          C-C) (CHEMOKINE CC).
1; J04467; G387169; -.
1; M19681; G387168; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NEUTROPHILS.
                                                                                                                                                                           EVCADPKKEWVQ
                                                                                                                                                     EICADPSEEWVQ
                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          91293127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  88234501.
                                                                                                                                                                                                                                                                                                                                            CHEMOTAXIS;
                                                                                                                                                                                                                                                 126
148 /
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAD.
                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MORRISON
CAD. SCI.
                                                                                                                                                                                                                                                  8
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                                                                                                                                                                            84
                                                                                                                                                                                                                                                                                                                                        SMALL_CYTOKINES_CC; 1.
KIS; SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN
                                                                                                                                                                                                                                                                                                       23
148
24
                                                                                                                                                                                                             84.8%;
                                                                                                                                                                                                                                                                         75
                                                                                                                                                                                                                                                  16326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ФM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S.A.
                                                                                                                                                                                                                                                  ¥.
                                                                                                                                                                                                               Score
Pred.
                                                                                                                                                                                                                                                         BY SIMILARITY.

MONOCYTE CHEMOTACTIC PRO
PYRROLLDONE CARBOXYLIC A
SIMILARITY).
BY SIMILARITY
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STILES C.D.;
. 85:3738-3742(1988).
VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                    Ή,
                                                                                                                                                                                                                                                  B7572BBC CRC32;
                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                               78; DB 1;
No. 6.60e-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CONINGS R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                148
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                                                                                                                                                                                                                        Length 148;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MONOCYTES, BUT
                                               (MIP-1-BETA) (IMMUNE
                                                                                                                                                                                                                                                                                                       PROTEIN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENAERTS J.-P.,
                                                                                                                                                                                                    Indels
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RESULT TARGET OF THE SULT TARGET
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Best Local S
Matches
                                                                                                                             SEQUENCE FROM N.A. MEDLINE; 90290466. SHYY Y.J., LI Y.S., 1 BIOCHEM. BIOPHYS. RE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P13500;
01-JAN-1990
01-JAN-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OMOH
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DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOTACTIC AND ACTIVATING FACTOR) (MCAF) (MONOCYTE SECRETORY PROTEIN JE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MCP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <del>+</del> +
                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
MEDLINE; 89165862.
FURUTANI Y., NOMURA H.,
LARSEN C.G., OPPENHEIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; C
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MORI S., GOTO K., GOTO F., MUTAKAMI K., (INT. IMMUNOL. 6:149-156(1994).
SEQUENCE FROM N.A
                                 SEQUENCE FROM N.A.
MEDLINE; 91207938.
CHANG H.C., HSU F., FREEMAN G..
INT. IMMUNOL. 1:388-399(1989).
                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
MEDLINE; 90097880.
ROLLINS B.J., STIER P., ERNST T.,
MOL. CELL. BIOL. 9:4687-4695(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                   BIOCHEM. BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SCYA2 OR MCP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE;
                                                                                                                                                                                                                                          YOSHIMURA T., YUHKI
LEONARD E.J.;
                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A. MEDLINE; 89153605.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN-NEW
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EUTHERIA; LAGOMORPHA
                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MONOCYTE CHEMOATTRACTANT PROTEIN 1) (HC11) (SMALL INDUCIBLE CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (BY SIMILARITY).
SUBUNIT: HOMODIMER (BY
SIMILARITY: BELONGS TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SAPIENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -C) (CHEMOKINE CC).
D17402; G599578; -
TE; PS00472; SMALL_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
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                                                                                                                                                                                                                         244:487-493(1989).
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34
35
3A,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                               RES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83.7%;
                                                                                                                             KOLATTUKUDY
ES. COMMUN. 1
                                                  FREEMAN G.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23
92
58
74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMUN. 159:249-255(1989).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    NOTAKE M., OYAMA
J.J., MATSUSHIMA
                                                                                                                                                                                                                                                                MOORE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIMILARITY).
THE INTERCRINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MUTAKAMI K., OHKAWARA S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 77;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MACROPHAGE INFLAMMATORY PROTEIN 1-BETA.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BY SIMILARITY
                                                                                                                                                                                                                                                              S.K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A629AB2D
                                                                                                                           Y P.E.;
169:346-351(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                      WONG
                                                      GRIFFIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                OYAMADA Y.,
                                                                                                                                                                                                                                                            APPELLA E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1; Leuy
1.10e-04;
-has 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99
                                                                                                                                                                                                                                                                                                                                                        G.G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₽
                                                  J.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BETA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CHEMOKINETIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FUKUI T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                              LERMAN M.I.,
                                                      REINHERZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    YOSHINAGA M.;
                                                E.L.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YAMADA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROPERTIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
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MEDLINE; 94150478.
LI Y.S., SHYY Y.J., '
KOLATTUKUDY P.E.;
MOL. CELL. BIOCHEM.
                                         EMBL;
EMBL;
EMBL;
EMBL;
EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 94253189.
ZHANG Y.J., RUTLEDGE B.J., ROLLINS B.
J. BIOL. CHEM. 269:15918-15924(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 96234959.
HANDEL T.M., DOMAILLE P.J.;
BIOCHEMISTRY 35:6569-6584(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE; 97143
LUBKOWSKI J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ROBINSON E.A., YOSHIMURA T., LEONARD E.J., TANAKA SHABANOWITZ J., HUNT D.F., APPELLA E.; PROC. NATL. ACAD. SCI. U.S.A. 86:1850-1854(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EFFECT OF DELETION OF MEDLINE; 96195223.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GRONENBORN A.M., CLORE G.M.;
PROTEIN ENG. 4:263-269(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF 29-53 AND 82-92.
MEDLINE: 90211336.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE; 92095166.
YOSHIMURA T., LEONARD
                                                                                                                                                                                                                                                                                                                                                                                      SUBUNIT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             MUTAGENESIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WEBER M.,
                                                                                                                                                                                                                                                                                                                                        KIM K.-S., RAJARATHNAM K., CL
FEBS LETT. 395:277-282(1996).
                                                                                                                                                                                                                                                                                                                                                                       MEDLINE; 97053697.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRUCTURE BY NMR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BIOCHEM. BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE OF 24-99
MEDLINE; 89184525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADV. EXP. MED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 K-RAY CRYSTALLOGRAPHY (1.85 ANGSTROMS)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3D-STRUCTURE MODELLING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EXP. MED.
                                                                                                                                             ATHEROSCLEROSIS.
SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.
SUBUNIT: MONOMER OR THE N-TERMINUS CAN REGULATE REC.
PIM: PROCESSING AT THE N-TERMINUS CAN REGULATE REC.
CELL SELECTIVITY. DELETION OF THE AMINO- TERMINAL
IT FROM AN ACTIVATOR OF BASOPHIL TO AN EDSINOPHIL (
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                               FUNCTION: CHEMOTACTIC FÁCTOR THAT ATTRACTS MONOCYTES AND BASOPHILS BUT NOT NEUTROPHILS OR EGSINOPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. HAS BEEN IMPLICATED IN THE PATHOGENESIS OF DISEASES CHARACTERIZED BY MONOCYTIC INFILTRATES, LIKE PSORIASIS, RHEUMATOID ARTHRITIS OR ATHEROSCLEROSIS. MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF
         C-C) (CHEMOKINE CC).

; M31626; G386961; JOIN

; M31625; G386961; JOIN

; M31625; G386961; JOIN

; M24545; G307163; -...

; M28226; G338009; -...

; X14768; G34514; -...

; X14768; G358007; JOIN

; X14768; G358007; JOIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OWSKI J., BUJACZ G., DOMAILLE P.J., STRUCT. BIOL. 4:64-69(1997).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97143315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         UGUCCIONI M., BAGGIOLINI M., CLARK-LEWIS ED. 183:681-685(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CONINGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BIOL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 O E.J.;
305:47-56(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N-TERMINAL RESIDUES
                                                                                                  JOINED.
JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENAERTS J.-P., BILIAU A., COMMUN. 167:904-909(1990).
                                                                                                                                                                                                                                                                                                                                                      CLARK-LEWIS I.,
                                                                                                                                                            INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                              в.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HANDEL T.M., WLODAWER
                                                                                                                                                                                                                                                                                                                                                        SYKES B.D.;
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                                                                                                                                                                                                         RECEPTOR
                                                                                                                                                                          CEPTOR AND TARGET RESIDUE CONVERTS CHEMOATTRACTANT.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DAHINDEN C.
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EMBL; S71513; G240868; -
EMBL; A71786; G641145; -
PIR; A35474; A35474
PIR; S03339; S03339.
PDB; 1DOK; 12-MAR-97.
PDB; 1DOM; 14-CCT-96.
PDB; 1DON; 14-CCT-96.
                                                                                                                                                                  LINDSEY M.L., HAWKINS H.K., BIRDSALL H.H., MACKAY C.R., LAROSA G.J., ROSSEN R.D., SMITH C.W., ENTMAN M.L., CIRCULATION 95:693-700(197).

-I- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS. IMPORTANT FACTOR IN THE COURSE OF THE INFLAMMATORY REACTION TO REPERFUSION OF THE PREVIOUSLY ISCHEMIC MYCCARDIUM. MAY PLAY A SIGNIFICANT ROLE IN MONOCYTE TRAFFICKING INTO THE REPERFUSED MYCCARDIUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P52203;
01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE
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TISSUE-JUGULAR VEIN ENDOTHELIAL;
MEDLINE; 97176620.
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                                                                                                                                                                                                                                                                                                                                  KUMAR A.G., BALLANTYNE C.M., MICHAEL L.H., LINDSEY M.L., HAWKINS H.K., BIRDSALL H.H., ROSSEN R.D., SMITH C.W., ENTMAN M.L.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SCYA2 OR MCP1.
CANIS FAMILIARIS (DOG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHEMOATTRACTANT PROTEIN-1).
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SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIB INDUCTION: BY THE ALPHA.
TISSUE SPECIFICITY: ENDOTHELIUM OF SMALL VEINS, AND INFILTRATING LEUKOCYTES.
SIMILARITY: BELONGS TO THE INTERCRINE BET C-C) (CHEMOKINE CC).
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; CHEMOTAXIS; SIGNAL; INFLAMMATORY RESPONSE;
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R->L: LOSS OF ACTIVITY
D->L: 90% REDUCTION IN ACTIVITY
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                             INTERCRINE BETA FAMILY (SMALL CYTOKINE
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MACKAY C.
                                                                                    VEINS
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                                                                                                                                           (BY SIMILARITY).
                                                                                    AND
                                                                                                                                                                                                                                                                                                                                                            G.L., YOUKER K.A., R., LAROSA G.J.,
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PROSITE; PS00472; SMALL_CYT
CYTOKINE; CHEMOTAXIS; SIGNA
SIGNAL 1 23
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRA
                               MIIA_RAT STANDARD; PRT; 92 AA.
P50229;
01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA).
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RATTUS NORVEGICUS (RAT)
                     SCYA3 OR MIP1A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (BY SIMILARITY).
-!- SUBUNIT: HOMODIMER (BY
-!- SIMILARITY: BELONGS TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 14-90 FROM N.A.

PETRENKO O., ENRIETTO P.J.;

SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.

-I- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE-BONE MARROW;
MEDLINE; 95369710.
PETRENKO O., ISCHEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL;
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L34553; G509596; -.
L34553; G509596; -.
CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                        Similarity
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llarity 58.3%;
Conservative
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11121
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THE INTERCRINE
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Pred. No. 1.
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Pred. No.
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                                                                                                                                                                                                                                                                                     Mismatches
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                                                                                                                                                                                                                                                                                                                                                           M (IN REF. 7084 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            77; DB 1; I
No. 1.10e-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>-</u>
                                                                                                                                                                                                                                                                                                      DB 1; L
1.84e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                        INFLAMMATORY PROTEIN 1-BETA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BETA FAMILY
                                                                                                                                                                                                                                                                                                                                                                             2)
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                                                                                                                                                                                                                                                                                                                      Length 90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2.
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                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROPERTIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NEOGNATHAE;
                                                                                                                                                                                                                                                                                   0
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Best Local
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DISULFID
CONFLICT
CONFLICT
SEQUENCE
                                                                                                                                                                                          MCP1_PIG
P42831;
01-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; U224
EMBL; U064
PROSITE; F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAKAGAWA H., SHIOTA S., TAKANO K., SHIBATA F., KATO H.;
BIOCHEM. BIOPHYS. RES. COMMUN. 220:945-948(1996).

-I- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
HAS CHEMOTACTIC ACTIVITY FOR MONOCYTES, NEUTROPHILS, EOSINOPHILS,
BASOPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG TWP-ALPHA
PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AND
MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE
PRODUCTION OF THE ALPHA WHICH IN TURN UP-REGULATES VASCULAR
                                                                                                                                               MONOCYTE
SCYA2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE; 95298037.
SHI M.M., GODLESKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EUTHERIA;
                                                                             SEQUENCE FROM N.A. MEDLINE; 94183284.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 9523
SHANLEY T.P.,
              TISSUE-BRAIN;
ZACH O.R.F.;
                                                                                                                                      SUS
                                                                                                                                                                     01-NOV-1995
15-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                          CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-WISTAR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 24-57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-LONG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SHI M.M., GODLESKI J.J., PAULAUSKIS J.D.;
BIOCHEM. BIOPHYS. RES. COMMUN. 211:289-295(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN=CD-1; TISSUE=LUNG;
  SUBMITTED
                                 SEQUENCE FROM N.A.
                                                        BIOCHEM. BIOPHYS.
                                                                                                               EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
EUTHERIA; RODENTIA.
                                                                    HOSANG
                                                                                                                          EUKARYOTA;
                                                                                                                                                                                                                                                                                  71 QICADPKETWVQ
                                                                                                                                                                                                                                                             1 EICADPSEEWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IMMUNOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C-C)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                    SCROFA (PIG)
                                                                                                                                                                                                                            14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BINDS HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFLUX. THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                             U22414; G790633; -.
U06435; G459110; -.
TE; PS00472; SMALL_CYTOKINES_CC; 1.
INE; CHEMOTAXIS; INFLAMMATORY RESPONSE;
                                                                    K., KNOKE I.,
                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (CHEMOKINE CC).
                                                                                                                                                         995 (REL. 32, CREATED)
995 (REL. 32, LAST SEQUENCE UPDATE)
998 (REL. 36, LAST ANNOTATION UPDAT
CHEMOTACTIC PROTEIN 1 PRECURSOR (M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96183056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ONG EVANS; TISSUE-LUNG; 95238980.
                                                                                                               ARTIODACTYLA
 (JUL-1994)
                                                                                                                          METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                     92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ., SCHMAL H., FRIEDL
154:4793-4802(1995).
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34
57
                                                                                                                                                                                                                                                                                                        Conservative
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A
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                                                        RES.
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                                                                                                                                                                                                                                                                                                                  82.6%;
                                                                                                                                                                                                                                                                                                                                                    10335 MW;
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92
57
73
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                                                                  KLAUDINY J.,
                                                        COMMUN.
EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                             MACROPHAGE INFLAMMATORY F
BY SIMILARITY.
BY SIMILARITY.
A -> T (IN REF. 2).
C -> W (IN REF. 2 AND 3).
                                                                                                                                                                                                                                                                                                                  Score 76; DB 1; 1
Pred. No. 1.84e-04
                                                                                                                        VERTEBRATA; TETRAPODA;
                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                    F48CF89F
                                                        J., WEMPE F., WUTTKE
199:962-968(1994).
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                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                         UPDATE)
SOR (MCP-1).
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                                                                                                                                                                                                                                                                                                                                                                                                                              SIGNAL; HEPARIN-BINDING
                                                                                                                                                                                                                                                                                                                            Length 92;
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                                                                                                                                                                                                                                                                                                        Indels
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                                                                                                                         MAMMALIA;
                                                                  SCHEIT K.H.;
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RESULT
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Best Local Similarity
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MCPB_BOVIN
P80343;
                                                                                                                                                                                                                                                                                                                                                                                                                  NON_TER
DISULFID
DISULFID
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                 MIIB_RAT STANDARD; PRT; 92 AA.
P50230;
01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA PRECURSOR (MIP-1-BETA).
SCYA4 OR MIP1B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE, 95034774.

MEDLINE, 95034774.

PROOST P., WUYTS A., LENAERTS J.-P., VAN DAMME J.;

BIOCHEMISTRY 33:13406-13412(1994).

-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,

NEUTROPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. AI
THE RELEASE OF GELATINASE B. THIS PROTEIN CAN BIND HEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-FEB-1995 (REL. 31, CREATED)
01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UDDAT
MONOCYTE CHEMOTACTIC PROTEIN 1B (MCP-1B) (F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL;
  RATTUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-KIDNEY;
                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73 EICAEPKQKWVQ
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                                                                                                                                                                                                                                  \vdash
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PTM: THE N-TERMINAL IS BLOCKED.
SIMILARITY: BELONGS TO THE INTERCRINE
C-C) (CHEMOKINE CC).
SITE: PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUBUNIT: MONOMER OR SIMILARITY: BELONGS
                                                                                                                                                                 16
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                                                                                                                                                                                                                             EICADPSEEWVO
NORVEGICUS (RAT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHEMOTAXIS; HEPARIN-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ARTIODACTYLA.
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35
99 AA;
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10
74 AA;
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llarity 66.7%;
Conservative
                                                                                                                                                                                                                                                                                                           80.4%;
larity 66.7%;
Conservative
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75
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                                                                                                                                                                                                                                                                                                           Score 74; DB 1; I
Pred. No. 5.06e-04;
1; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                             BY SIMILARITY.
BY SIMILARITY.
66172F08 CRC32;
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Pred. No. 1.84e-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        74
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                    Length 74;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 99;
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IC ACID (BY
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(SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ALSO INDUCES
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Matches
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DISULFID
SEQUENCE
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P49873;
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DISULFID
SEQUENCE
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23
BY SIMILARITY.
                                                                                                                                                                                                                                                                      SIGNAL
CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-LONG EVANS; TISSUE-LUNG;
JONES M.L., SHANLEY T.P., SCHMAL H., FRIEDL H.P., WARD P.A.;
SUBMITTED (FEB-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES.
-!- SUBUNIT: HOMODIMER (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUS SCROFA (PIG).
EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                    -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHEMOATTRACTANT PROTEIN 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BIOCHEM. BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HOSANG K.K., KNOKE I.I., SCHEIT K.K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. MEDLINE; 95091716.
                                                                                                                                                                                                                                                                                                             CYTOKINE;
                                                                                                                                                                                                                                                                                                                                PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EUTHERIA;
                                      73 EVCADPQQKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      72 QICADPSEPWV 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
    ديم
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                   FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES. THIS PROTEIN CAN BIND HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                       SIMILARITY: BELONGS C-C) (CHEMOKINE CC)
                                                                                                                                                                                                                                                                                                                                                                                          SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM SIMILARITY: BELONGS TO THE INTERCRINE BETA FAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17
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EICADPSEEWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OR MCP
                                                                                                                                                                                                                                                                                                                              Z48480; G683719; -.
E; PS00472; SMALL_CYTOKINES_CC;
                                                                                 Similarity
8; Conse
                                                                                                                                                                                                                                                                                                             CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ARTIODACTYLA.
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34
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2 AA;
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1 AA;
                                                                               Conservative
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  12
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                                                                                                  80.4%;
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75
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24
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92
58
74
                                                                                                                                                                                                                                                                                                           SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMUN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KLAUDINY J.J., WEMPE F.F.,
                                                                             Score 74;
Pred. No. 5
2; Mismat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 74; DB 1; L
Pred. No. 5.06e-04;
                                                                                                                                                                                  SIMILARITY).
BY SIMILARITY
BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MACROPHAGE INFLAMMATORY PROTEIN 1-BETA
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                            MONOCYTE CHEMOTACTIC PROTEIN 2. PYRROLIDONE CARBOXYLIC ACID (BY
                                                                                                                                                                                                                                                                                     HEPARIN-BINDING;
BY SIMILARITY.
                                                                                                                                                               B7620BCF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3C82B006 CRC32;
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                                                                                                                                                                                  SIMILARITY.
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                                                                                 Mismatches
                                                                                                DB 1; Le
5.06e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99
                                                                                                                                                             CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                          ILIBRIUM (BY
BETA FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL.
                                                                                                                    Length 99;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 92;
                                                                                                                                                                                                                                                                                                           INFLAMMATORY RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WUTTKE
                                                                                                                                                                                                                                                                                                                                                                                                              SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                          (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     W.W.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EOTA_RAT STAN
P97545; 008780;
15-JUL-1998 (REL. 3
15-JUL-1998 (REL. 3
15-JUL-1998 (REL. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MCP2_BOVIN STAN
Q09141;
Q1-NOV-1995 (REL. 3
Q1-NOV-1995 (REL. 3
Q1-NOV-1998 (REL. 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DISULFID
DISULFID
SEQUENCE
             SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

-! FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHIS, A PROMINENT FEATURE OF ALLERGIC INFLAMMATORY REACTIONS (BY SIMILARITY).

-! SUBCELLULAR LOCATION: EXTRACELLULAR.
-!- STM: OFLYCOSYLATED (PROBABLE).
-!- FIM: OFLYCOSYLATED (PROBABLE).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C°C) (CHEMOKINE C°C).
EMBL; 908338; EZYA141: -
EMBL; 908637; G2098785; --
EMBL; 908637; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE; |
CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                [1]
SEQUENCE FROM N.A.
MEDLINE; 94114084.
WEMPE F., HANES J., SCHEIT K.H.;
MEMPE F., HANES J., SCHEIT K.H.;
MEMPE FACTOR
                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. WILLIAMS C.M., NEW FLANAGAN B.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EOTAXIN PRECURSOR (EÓSINOPHIL CHEMOTACTIC PRÓTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
CHEMOTATRACTANT PROTEIN 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHAIN
EOSINOPHIL; CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                        SUBMITTED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BOS TAURUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SCYA8 OR MCP2
                                                                                                                                                                                                                                                                                        TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 - ! - SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAN BIND HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DVCADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EICADPSEEWVQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          $67954; E118856; -. $67956; G544997; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PS00472; SMALL_CYTOKINES_CC; CHEMOTAXIS; SIGNAL; HEPARIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CHEMOKINE CC)
                                                                                                                                                                                                                                                                                                                                                      (DEC-1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ARTIODACTYLA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36, CREATED)
36, LAST SEQUENCE UPDATE)
36, LAST ANNOTATION UPDATE
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75
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                                                                                                                                                                                                                                                                                                                                                      ō
                                                                                                                                                                                                                                                                                                                                                                                             D.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                      EMBL/GENBANK/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                               WILSON S.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 74; DB 1; 1
Pred. No. 5.06e-04
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY.
BY SIMILARITY.
9BA2CD26 CRC32;
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BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MONOCYTE CHEMOTACTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERTEBRATA; TETRAPODA; MAMMALIA;
  GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         UPDATE)
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                                                                                                                                                                                                                                                                                                                                                                                                  COLEMAN J.C.
                                                                                                                                                                                                                                                                                                                                                      DATA BANKS
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SIGNAL;
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                                                      Best Loc
Matches
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Best Local
                                                                                           Query Match
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01-FEB-1996 (REL. 3
15-JUL-1998 (REL. 3
EOTAXIN PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CARBOHYD
CONFLICT
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DISULFID
                                                                                                                                                 DISULFID DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EOTA_MOUSE P48298;
                                                                                                                                                                                                                                                                                             -!- PTM: O-GLYCOSYLATED (PROBABLE).
-!- SIMILARITY: BELONGS TO THE INTE
C-C) (CHEMOKINE CC).
EMBL; U26426; G995911;
EMBL; U40672; G1111937; -.
                                                                                                                                                                                        CHAIN
                                                                                                                                                                                                       INFLAMMATORY
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                           - -
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GONZALO J.-A., JIA G.-Q., AGUIRRE JENKINS N.A., LIN G.-S., KATZ H., GUTIERREZ-RAMOS J.-C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=C57BL/6J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROC. NATL. ACAD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MUS MUSCULUS
EUKARYOTA; MI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFLAMMATORY
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE; 96158746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IMMUNITY 4:1-14(1996).

-i- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS,
DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS ()
FEATURE OF ALLERGIC INFLAMMATORY REACTIONS), BUT NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           71 EICADPKKKWVQ
71 EICADPKKKWVQ 82
                                                    Local Similarity es 9; Conse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \mathbf{L}
                                                                                                                                                                                                                                                                                                                                                                                      SUBCELLULAR LOCATION: EXTRACELLULAR.
TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN THE THYMUS.
EXPRESSION INDUCTION: EXTRACELLORG (TYPE I ALVEOLAR EPITHELIAL
CELLS), INTESTINE, HEART, SPLEEN, KIDNEY.
INDUCTION: BY INTERFERON-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LYMPHOCYTES, MACROPHAGES OR NEUTROPHILS.
                                                                                                                                                                                                                                                          MGI:103576; SCYA11.
ITE; PS00472; SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EICADPSEEWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96004658.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JS (MOUSE).
METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97
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24
32
33
7 AA;
                                                                                                                                                   Y RESPONSE.
1 23
24 97
32 57
33 73
                                                                                                                                                                                                                                            CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 23
24 97
32 57
32 73
33 73
94 94
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34
34
                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LUSTER A.D.,
. SCI. U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 33. CREATED)
33. LAST SEQUENCE UPDATE)
36. LAST ANNOTATION UPDATE)
(EOSINOPHIL CHEMOTACTIC PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12
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                                                                                                                                10893
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                                                                       79.3%;
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                                                      Score
Pred.
0; M
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Pred.
                                                                                                                          EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
F85A96BC CRC32;
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L -> S (IN REF.
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                                                                                                                                                                                                         POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERTEBRATA; TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LEDER P.;
92:8960-8964(1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05B4ED45 CRC32
                                                                                                                                                                                                                                                                                                                                                         INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                    re 73; DB 1; Le
1. No. 8.35e-04;
Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               73;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                V., FRIEND D., COYLE A.J.,
LICHTMAN A., COPELAND N.G.,
                                                                                                                                                                                                                                          GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73; DB 1; I
No. 8.35e-04;
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                                                                                       Length 97;
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                                                                                                                                                                                                                                          SIGNAL;
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                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NOT A
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A PROMINENT
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                     MIP4_HUMAN STANDARD; PRT; 89 AA.

2 P55774;
2 P55774;
2 P55774;
2 P55774;
2 P5774;
3 P5774;
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Best Local
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Q62401;
Q1-NOV-1997
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DISULFID
SEQUENCE
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MEDLINE; 97079149.
JIA G.-Q., GONZALO J.A., LLOYD C., KREMER
WERSHIL B.K., GUTIERREZ-RAMOS J.C.;
J. EXP. MED. 184:1939-1951(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AND LYMPHOCYTES BUT NOT NEUTROPHILS, POTENT MONOCYTES,
AND LYMPHOCYTES BUT NOT NEUTROPHILS, POTENT MONOCYTE ACTIVE
CHEMOKINE THAT SIGNALS THROGEN CER. INVOLVED IN ALLERGIC
INFLAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A
PIVOTAL ROLE DURING EARLY STAGES OF ALLERGIC LUNG INFLAMMATION.
-!- SUBUNIT: HOMODIMER (BY SIMILARITY).
-!- TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES AND
THYMUS. ALSO FOUND IN THE SALLVARY GLANDS CONTAINING LYMPH NODES,
BREAST, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.
-!- INDUCTION: BY IFN-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-1997 (REL. 35,
01-NOV-1997 (REL. 35,
15-JUL-1998 (REL. 36,
MONOCYTE CHEMOTACTIC F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C-C) (CHEMOKINE CC).
EMBL; U50712; G1477582; -.
EMBL; U66670; G1881583; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     J. EXP. MED. 185:99-109(1997).
-!- FUNCTION: CHEMOTACTIC FACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. MEDLINE; 97149438.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHEMOKINE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MGD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SARAFI M.N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LUSTER A.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            72 EICADPKEKWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 EICADPSEEWV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MGI:108224; SCYA12.
ITE; PS00472; SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GARCIA-ZEPEDA E.A., MACLEAN J.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            79.3%;
81.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            74
11659
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, LAST ANNOTATION UPDATE)
PROTEIN 5 PRECURSOR (MCP-5)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL; INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ₩;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 73; DB 1;
Pred. No. 8.35e-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ⋛
                                                                       TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ۲.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHARO I.F.,
                                                                                                                                                                          ARC) (ALTERNATIVE (AMAC-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ľ.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                          (PULMONARY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAMMALIA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ر.
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RESULT IN THE PROPERTY OF THE 
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Best Local
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LI H., RUBEN S.
PATENT NUMBER U
[2]
                                                                                                                                                                                                                                                                                                                                                                                                 EOTA_HUMAN STANDARD: PRT; 97 AA. P51671; P50877; Q92490; Q92491; 01-OCT-1996 (REL. 34, CREATED) 01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE) 01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE) EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHAIN
DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-AORTA, AND MEDLINE; 97376836.
                                                                                                                                                                                                   GARCIA-ZEPEDA E.A.,
LUSTER A.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HIESHIMA K., IMAI T., BABA M., SHOUDAI K., ISHIZUKA K.,
NAKAGAWA T., TSURUTA J., TAKEYA M., SAKAKI Y., TAKATSUKI K.,
MIURA R., OPDENAKKER G., VAN DAMME J., YOSHIE O., NOMIYAMA H.;
J. IMMUNOL. 159:1140-1149(1997).
                                                                                                                                                                                                                                                                                                              HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; AB000221; D1022520; -.
EMBL; Y13710; E321838; -.
PROSITE; PS00472; SMALL_CYTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WELLS T.N.C., PETTSCH M.C.;

J. LEUKOC. BIOL. 61:545-550(1997).

J. LEUKOC. BIOL. 61:545-550(1997).

J. LEUKOC. BIOL. 61:545-550(1997).

J. LEUKOC. BIOL. 61:545-550(1997).

PUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LYMPHOCYTES BUT NOT MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED IN B CELL MIGRATION INTO B CELL FOLLICLES IN LYMPH NODES.

TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN THE LUNG. A LOW LEVEL EXPRESSION IS SEEN IN LYMPHOID TISSUES SUCH AS LYMPH NODE THYMUS AND APPENDIX.

THYMUS AND APPENDIX.

TINDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
                                            SMITH H., S
MACKAY C.R.
                                                       SEQUENCE FROM N.A.

MEDLINE; 96189937.

MEDLINE; 96189937.

MITH H., SHI X., GONZALO J.A., NEWMAN W., GUTIERREZ-RAMOS.
                                                                                                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE; 96181758.
                                                                                                                                                                                                                                                                                                                                                                                      SCYAll.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISCUSSION OF SEQUENCE.
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                       CLIN.
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V., MUELLER C., P
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                       INVEST.
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21
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9 AA;
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                    97:604-612(1996)
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XIS; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                 (EOSINOPHIL CHEMOTACTIC PROTEIN).
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                                                                                                                                                                                                                        ROTHENBERG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 549
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PARTIAL SEQUENCE.
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Pred. No. 1.38e-03;
2; Mismatches 2
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BY SIMILARITY.
052AA3DC CRC32;
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                                                                                                                                                                                                                                                                                                                                     VERTEBRATA;
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                                                                                                                                                                                                                   OWNBEY T.R.,
                                                                                                                                                                                                                                                                                                                                TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N., ORFANOS
DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IN THE LUNG. A LOWER SUCH AS LYMPH NODES,
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                                                                 J.C.,
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                                                                                 KASSAM
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CITYUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN CENTRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, A PROMINENT CENTRECTLULAR LOCATION: EXTRACELLULAR.

CITY SUBCELLULAR LOCATION: EXTRACELLULAR.

CITY: O-GLYCOSYLATED (PROBABLE).

CITY: O-GLYCOSYLATED (PROBABLE).

CITY: O-GLYCOSYLATED (PROBABLE).

CITY: DELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE COL) (CHEMOKINE CC).

CITY: DELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE COL) (CHEMOKINE CC).

REMBL; U46573; G1552241; -...

REMBL; 275669; E251275; -...
                                                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 974
HEIN H., SCH
BARTELS J.;
MCPA_BOVIN STANDARD; PRT; 99 AA.
P28291;
01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1A PRECURSOR (MCP-1A) (MCP-1) (ACIDIC
                                                                                                                                                                                                                                                                       VARIANT
VARIANT
VARIANT
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DISULFID
DISULFID
VARIANT
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KITAGRA M., NAKAJIMA T., IMAI T., HARADA S.,
TIFFANY H.L., MUPHY P.M., YOSHIE O.;
J. BIOL. CHEM. 271:7725-7730(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE; 97312708.
GARCIA-ZEPEDA E.A., ROTHENBERG
MORTON C.C. LUSTER A.D.;
GENOMICS 41:471-476(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHRISTOPHERS E., SCHROEDER J.M.;
BIOCHEM. BIOPHYS. RES. COMMUN. 225:1045-1051(1996).
                                                                                                                                                                                                                                                           SEQUENCE
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TISSUE-SMALL INTESTINE;
                                                                                                                                                                                                                                                                                                                                                                            SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                     PROSITE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                          NFLAMMATORY
                                                                                                                                                                    71 DICADPKKKWVQ
                                                                                                                                                                                                               Local Similarity
                                                                                                                                         EICADPSEEWVO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97445071.
SCHLUETER C.,
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32 57
32 77
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10732 MW;
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INE; CHEMOTAXIS; GLY
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66.7%;
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                                                                                                                                                                                                                                                     POTENTIAL.

EOTAXIN.

BY SIMILARITY.

BY SIMILARITY.

BY SIMICANIE 3

A -> P (IN CLONE 3

A -> R (IN CLONE 5

K -> R (IN CLONE 5

K -> R (IN CLONE 5
                                                                                                                                                                                                               Score 72;
Pred. No.
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E:
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                                                                                                                                                                                                               1.38e-03;
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                                                                                                                                                                                                                           DB 1;
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                                                                                                                                                                                                                                                                       53).
                                                                                                                                                                                                                           Length 97;
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S
                                                                                                                                                                                                                                                                                                                                                                                                        SIGNAL;
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                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SCHROEDER J.M.
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P14097;
01-JAN-1990
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DISULFID
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JAA-1990 (REL. 13, CREATED)
01-FEB-1996 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-BETA PRECURSOR (MIP-1-BETA) (H400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL;
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MEDLINE; 94338337.

WEMPE F., KUHLMANN J.K., SCHEIT K.H.;

BIOCHEM. BIOPHYS. RES. COMMUN. 202:1272-1279(1994).

-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,
                                                 SEQUENCE FROM N.A. MEDLINE; 89093958.
BROWN K.D., ZURAWS
                                                                                                                                                                          SHERRY B., TEKAMP-OLSON P., GALLEGOS C., WOLPE S.D., MASIARZ F., COIT D., CERAMI I. J. EXP. MED. 168:2251-2259(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PIR; A39296; A39296.
PIR; JC2336; JC2336.
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MEDLINE; 92096117.
WEMPE F., HENSCHEN A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEMINAL FLUID PROTEIN).
BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE; 89067830.
                                                                                                                                                                                                                                                                                                                                                                                                                                               PROTEIN) (SIS-GAMMA) (ACT2).
SCYA4 OR MIP1B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WEMPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        [2]
                                                                                                                                                                                                                                                                                                                                                                                                                         MUS MUSCULUS (MOUSE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CHAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE=SEMINAL PLASMA;
MEDLINE; 92181448.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                           EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                             EUKARYOTA; METAZOA;
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les 8; Conser
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                               IMMUNOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NEUTROPHILS.
SIMILARITY: BELONGS TO C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            P13500;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                L32659; G624394; -. 
M84602; G163395; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BIOPHYS. RES. COMMUN. 183:232-237(1992)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HENSCHEN A., SCHEIT K.H.;
BIOL. 10:671-679(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHEMOTAXIS; S
1 23
24 99
24 24
                                                                                                                                                                                                                                                                                                                                                                 RODENTIA
                               ZURAWSKI S.M., MOS
142:679-687(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SMALL_CYTOKINES_CC; (IS; SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11114 MW;
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66.7%;
                                                                                                                                                                                                                                                                                                                                                                                          CHORDATA;
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75
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                                                          MOSMANN T.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 72; DI
Pred. No. 1.:
2; Mismatcl
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MONOCYTE CHEMOTACTIC PRO
PYRROLIDONE CARBOXYLIC A
SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
CRE5821D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                          VERTEBRATA;
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1.38e-03;
                                                              ZURAWSKI
                                                                                                                                                                                                                                           BAUER
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                                                                                                                                                                                                                                                                                                                                                                                    TETRAPODA; MAMMALIA;
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(BY
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Best Local S
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHEMOKINE CC-1 PRECUP
SCYA14 OR NCC2.
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; C
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C-C) (CHEMOKINE CC).
EMBL; M23503; G533245; -
EMBL; M35500; G19997; -
EMBL; X62502; G31927; -
PIR; C30552; C30552.
PIR; JL0088; JL0088.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCC1_HUMAN
Q16627;
01-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN=DBA/2J;
DAUBERSIES P.,
PLUMB M.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
DISULFID
CONFLICT
CONFLICT
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PIR; JLUUBB, CARRIER SE, THUM.
HSSP; P13236; 1HUM.
HGD; MGI:98261; SCYA4.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
PROSITE; PURMOTAXIS; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1997
01-NOV-1997
                                                                                                                                                                                                                                                                                                                                        SCHULZ-KNAPPE P., MAEGERT H.-J., DEWALD B., KUBBLES M., TOMECZKOWSKI J., KIRCHHOFF K., I KKIT A., REINECKE M., SILLARD R., PARDIGOL BAGGIOLINI M., FORSSMANN W.-G.; J. EXP. MED. 183:295-299(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -!- FUNCTION: MONOKINE WITH INFLAMMAT(
-!- SUBUNIT: HOMODIMER (BY SIMILARITY)
-!- SIMILARITY: BELONGS TO THE INTERC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUBMITTED (OCT-1991)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                           TISSUE-PLACENTA;
                                                                                                   SUBMITTED (OCT-1995) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                   PARDIGOL A., MAEGERT FORSSMANN W.-G.;
                                                                                                                                                                                                                       SUBMITTED (MAY-1996)
                                                                                                                                                                                                                                                            PARDIGOL A., MAEGERT
                                                                                                                                                                                                                                                                                FISSUE-LIVER;
                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 96136773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-BONE MARROW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.,
                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                           SCHULZ-KNAPPE P.;
                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        72 QICANPSEPWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 EICADPSEEWV
                  FUNCTION: HAS WEAK ACTIVITIES ON HUMAN MONOCYTES AND ACTS VIA RECEPTORS THAT ALSO RECOGNIZE MIP-1 ALPHA. IT INDUCED INTRACELLULAR CA2+ CHANGES AND ENZYME RELEASE, BUT NO CHEMOTAXIS, AT CONCENTRATIONS OF 100-1,000 NM, AND WAS INACTIVE ON T
  LYMPHOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
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1 PRECURSOR (HCC-1) (NCC-2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LEPRETRE
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LEPRETRE F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11
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  NEUTROPHILS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     35, CREATED)
35, LAST SEQUENCE UI
35, LAST ANNOTATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10168
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72.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AND
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NE WITH INFLAMMATORY I
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                                                                                                                                                                                                                                                          H.-J., ZUCHT H.D.,
                                                                                                                                        H.-J., CIESLAK A., HILL O.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                       EMBL/GENBANK/DDBJ DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W.
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Pred. No. 2.
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BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
BY CONTROL OF 
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  AND
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
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EOSINOPHIL LEUKOCYTES. ENHANCES THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-93
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; I
2.26e-03;
                                                                                                                                                                                                                                                              FORSSMANN W.-G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AND CHEMOKINETIC PROPERTIES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A
                                                                                                                                                                                                                                                                                                                                                                                RAIDA M., ADERMANN A., UGUCCIONI M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                       BANKS
                                                                                                                                        SCHULZ - KNAPPE
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Best Local S
Matches
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EMBL; 270292; 1
EMBL; 249269; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OVIS ARIES EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUN-1994
01-JUN-1994
01-NOV-1995
                                                                                                             DISULFID
DISULFID
SEQUENCE
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                                                                                                                                                                                                            PROSITE; E
                                                                                                                                                                                                                                                                                                                                                                                           SEOW H.F., YOSHIMURA T., WOOD P.R., COLDITZ I.G.;
IMMUNOL. CELL BIOL. 72:398-405(1994).
-!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL
CHAIN
                                                                                                                                                                                                                                                                PIR; S42496; S42496.
                                                                                                                                                                                                                                                                                  -i- SIMILARITY: BELONGS TO THE C-x-C) (CHEMOKINE CXC).
EMBL; X78306; G463254; -.
EMBL; S74436; G786591; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LEGASTELOIS I., GREENLA
GENE 150:367-369(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE; 95121931.
LEGASTELOIS I., GREENLAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
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                                                                                                                                                                        CHAIN
                                                                                                                                                                                        SIGNAL
                                                                                                                                                                                                                                                  HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INTERLEUKIN-8
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75 EVCLDPKEKWVQ 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           74 VCTNPSDKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROLIFERATION OF CD34 MYELOID PROGENITOR CELLS.
TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN SEVERAL NORMAL
TISSUES: SPLEEN, LIVER, SKELETAL AND HEART MUSCLE, GUT, AND BONE
MARROW, PRESENT AT HIGH CONCENTRATIONS (1-80 NM) IN PLASMA.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                               RESPONSE TO AN INFLAMMATORY SUBUNIT: HOMODIMER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SHEEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601392;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ICADPSEEWVQ 12
                                                                                                                                                                                                                                                  P10145;
                                                     Similarity
                                                                                                                           PS00471; SMALL_CYTOKINES_CXC; 1.
PS00471; SMALL_CYTOKINES_CXC; 1.
CHEMOTAXIS; INFLAMMATORY RESPONSE;
1 22 BY SIMILARITY.
34 61 BY SIMILARITY.
36 77 BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95137691.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PS00472; SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ARTIODACTYLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         METAZOA;
                                                                                                               101 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (REL.
(REL.
                                   77.2%;
larity 66.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              35
36
                                                                                                                                                                                                                                              31L8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REL. 29, CREATED)
REL. 29, LAST SEQUENCE UF
REL. 32, LAST ANNOTATION
PRECURSOR (IL-8).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G1004269; -
E233856; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 77.2%;
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                                                                                                               MW;
                                   Score
Pred.
1; M
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BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERTEBRATA; TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
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                                                                                                                                                                                                                                                                                                                                           INTERCRINE
                                                                                                               5A574527
                                 e 71; DB 1; L
l. No. 2.26e-03;
Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                 STIMULUS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 71; DB 1; I
No. 2.26e-03;
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                                                                                                             CRC32;
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                                                                                                                                                                                                                                                                                                                                         ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                        SIGNAL.
                                                                       Length 101;
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Best Local S
Matches
                                       ILB_PIG
926894; p22951;
01-AUG-1991 (REL. 19, CREATED)
01-AUG-1992 (REL. 23, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
01-OCT-RUKIN-8 PRECURSOR (IL-8) (ALVEOLAR MACROPHAGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -1995 (REL. 3)
-1995 (REL. 3)
-1995 (REL. 32)
-1188
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P41324;
O1-FEB-1995
O1-FEB-1995
O1-NOV-1995
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DISULFID
SEQUENCE
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J. CLIN. INVEST. 95:89-103(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C-X-C) (CHEMOKINE CXC).
EMBL; D28772; G517100; -.
EMBL; D14285; G475152; -.
EMBL; U10308; G607814; -.
SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MATSUMOTO Y., MOHAMED A., ONODERA T., KATO H., OHASHI T., GOTTSKRA R., TSUJIMOTO H., HASEGAWA A., FURUSAWA S., YOSHIHARA ISHIKAWA J., HOTTA K., SUZUKI K., HIROTA Y.; CYTOKINE 6:455-461(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ISHIKAWA J., SUZUKI S., GENE 131:305-306(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CANIS FAMILIARIS (DOG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESPONSE TO AN INFLAMMATORY
-!- SUBUNIT: HOMODIMER.
-!- SIMILARITY: BELONGS TO THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN-MONGREL;
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MEDLINE; 95127913.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MATSUMOTO Y.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   75 EVCLDPKEKWVQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THA' BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. NEUTROPHIL ACTIVATION. IT IS RELEASED FROM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EICADPSEEWVQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PS00471; SMALL_CYTOKINES_CXC; 1. CHEMOTAXIS; INFLAMMATORY RESPONSE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
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31,
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (IL-8).
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BY SIMILARITY.
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No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Leny
. 2.26e-03;
-hes 3;
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A
            TETRAPODA; MAMMALIA
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IT IS ALSO IN
SEVERAL CELL'
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                                                                                                                          CHEMOTACTIC
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SO INVOLVED IN
CELL TYPES IN
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CHAIN
DISULFID
CONFLICT
CONFLICT
SEQUENCE
                                                                                                                  CCC3_HUMAN STANDARD; PRT; 109 AA. Q13954; Q1-01-NOV-1997 (REL. 35, CREATED) Q1-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE) Q1-NOV-1997 (REL. 35, TAST ANNOTATION UPDATE) QHEMOKINE CC-3 PRECURSOR (HCC-3).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PROSITE; I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -:- INDUCTION: BY LIPOPOLYSACCHARIDE.
-:- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE CY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GOODMAN R.B., FORSTROM J.W., OSBORN S.G., CHI E.Y., MARTIN T.R.;
J. BICL. CHEM. 266:8455-8463(1991).
-i- FUNCTION: IL-8 IS A CHEMOPACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-i- FUNCTION: IL-8 IS A CHEMOPACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS.
-i- TISSUE SPECIFICITY: ALVECUAR MACROPHAGES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         +++
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MEDLLNE; 94103307.
LIN G., PEARSON A.E., SCAMURRA R.W.,
WEISS D.J., MURTAUGH M.P.;
J., BIOL. CHEM. 269:77-85(1994).
EUTHERIA; PRIMATES [1]
                                                            HOMO SAPIENS (HUMAN)
EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE OF 26-45.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBMITTED
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUTHERIA; ARTIODACTYLA. [1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REVISION TO 23.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PS00471; SMALL_CYTOKINES_CXC; CHEMOTAXIS; INFLAMMATORY RESI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MAR-1996)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            86
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66.7%;
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103
61
77
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87
                                                                CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA; .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AND SEQUENCE OF 26-45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11633 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TO EMBL/GENBANK/DDBJ DATA BANKS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
RC -> CR (IN REF. 5).
K -> KK (IN REF. 2).
W; A012D59D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 71; DB 1; I
Pred. No. 2.26e-03;
1; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZHOU Y., BAARSCH M.J.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
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SO FIT FIND CCC RAP
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Best Local S
Matches
                                                                                   DISULFID DISULFID
                                                                                                                         PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYTOKINE; SIGNAL.
                                                                                                                                                     SUBMITTED (MAY-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                PARDIGOL A., MAEG SCHULZ-KNAPPE P.;
                                                                                                                                                                                                     SEQUENCE FROM N.A. TISSUE=LIVER;
                                                                           SEQUENCE
                                                                                                                                              EMBL;
                                                                                                        CHAIN
                                                                                                                   SIGNAL
                  90 VCINPSDKWVO 100
N
ICADPSEEWVO
                                                                                                                                             Z70293; E233858;
                                              Similarity
                                      9
                                                                          51
52
109 AA;
                                                                                                                                                                                           MAEGERT H.-J., ZUCHT H.D., FORSSMANN W.-G.
                                     Conservative
12
                                                                       109
75
91
12297
                                              77.28;
                                                                            WW.
                                                                                   POTENTIAL.
CHEMOKINE CC-3.
BY SIMILARITY.
BY SIMILARITY.
                                              Score 71; DB 1; 1
Pred. No. 2.26e-03;
                                      4.
                                                                           9AE90F93 CRC32;
                                      Mismatches
                                                       Length 109;
                                      Indels
                                      0,
                                      Gaps
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Search completed: Thu Apr 1 07:39:09 1999 Job time : 9 secs.

1 87 2 80 3 72 4 72 5 72 6 71 7 71 7 71 10 68 10 67 11 66 11 65 11 65 11 65 61 11 66 61 11 66 61 11 66 61 63 66 66 66 67 68 68 68 68 68 68 68 68 68 68 68 68 68	Result C	Statistics: Me Pred. No. is score greater and is derive	Database:	Post-processing:	Scoring table:	Title: Description: Perfect Score: Sequence:	Run on: Tabular output n	Release 3 Copyright D MPsrch_pp protein	
4.6 80 4 014745 LD78 7.0 119 4 0015467 IL-11 8.3 119 4 00175 MPIF 8.3 133 11 009002 SMALL 8.3 133 11 009006 BETA 7.2 134 4 000585 BETA 7.2 134 4 000585 BETA 7.2 134 4 000585 3.9 395 11 035933 FRACC 8.3 935 11 035933 CC CC 9.6 92 11 084930 CC CC 1.7 109 4 043927 CX3C 9.6 93 11 089093 CC CC 1.7 109 4 078423 CX3C 1.7 109 4 078423 C	SUMMARIES Query Query Match Length DB ID Description	an 25.394; Variance 35.421; scal- the number of results predicted by than or equal to the score of the d by analysis of the total score d	sptremb18 1:sp_archea 2:sp_bacteria 3:sp_fungi 5:sp_invertebrate 6:sp_mamma1 7:sp_ni 9:sp_phage 10:sp_plant 11:sp_rodent i 13:sp_vertebrate 14:sp_virus	Minimum Match 0% Listing first 100 summaries		>US-08-927-939-12 (1-12) from US08927939.pep 92 1 EICADPSEEWVQ 12	Thu Apr 1 07:39:27 1999; MasPar time not generated.	.1A John F. Collins, Biocomputing (c) 1993-1998 University of Edin istribution rights by Oxford Molec protein database search, using	
ALPHA BETA PRECUR 2.41e-06 2. INDUCIBLE CHEMOK 8.89e-05 -2. 4.70e-03 4.70e-03 CHEMOKINE EXODUS- 7.62e-03 FALKINE 7.62e-03 FALKINE ABCD-1. 5.09e-02 FIEMOKINE PRECURS 1.29e-01 HEMOKINE PRECURS 1.29e-01 DPHAGE-DERIVED CHE 3.21e-01 1B. 7.87e-01 DPHAGE-DERIVED CHE 3.21e-01 DPHAGE-DERIVE	on Pred. No.	e 0.717  chance to have a result being printed, istribution.	'la 3:sp_fungi 4:sp_human mammal 7:sp_nhc 8:sp_organelle 11:sp_rodent 12:sp_unclassified virus				ime 4.93 Seconds Million cell updates/sec	iting Research Unit. Edinburgh, U.K. Molecular Ltd Molecular Materman algorithm	(TM)
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HYPOTHETICAL 41.6 KD PHYPOTHETICAL 41.6 KD PROTEIN (FAAFIL).  SERINE RICH PROTEIN (FAAFIL).  NINX PROTEIN (FAAFIL).  NONSTRUCTURAL PROTEIN (FAAFIL).  11SA.  11.5 KD REPA PROTEIN (J. 51.5 KD REPA PROTEIN (J. 51.5 KD REPA PROTEIN (J. 51.5 KD PROTEIN (J. 51.5 KD PROTEIN (J. 51.5 KD PROTEIN (J. 51.5 KD REPA PRO	NEUROPILIN 2.  VASCULAR ENDOTHELIAL C HYPOTHETICAL 442.4 KD CEL1 MYCELIUM-ASSOCIAT FRNS. PROTECTAL TYPOGINE KINAC	NEUROPILIN 2. NEUROPILIN 2. NEUROPILIN 2. NEUROPILIN 2. NEUROPILIN 2. NEUROPILIN 2.	RNA POLIMERASE II LARG PROTEASE, SERINE, 12 N ENVELOPE GLYCOPROTEIN NEUROPILIN 2.	CONSERVED HYPOTHETICAL MYOSIN BINDING PROTEIN MYOSIN BINDING PROTEIN TOLUENE-3-MONOOXYGENAS	MYOSIN BINDING PROTEIN LARGE SUBUNIT RNA POLY C54D1.6 PROTEIN. CC CHEMOKINE-1.	TIFE 14 (HRV14), COMPL 14 (HRV-14) RNA SEQUEN VIF PROTEIN. R08H2.2. TZ2D1.12 PROTEIN.	LOW DENSITY LIPOPROTEI LOW DENSITY LIPOPROTEI T24B8.7 PROTEIN.	LECA-1 PROTEIN PRECURS EBI-1 LIGAND CHEMOKINE B LYMPHOCYTE CHEMOATTR COSMID ZC8. T01D3.3. ETN=HOMEODOMAIN GENE B	RANTES PRECURSOR.  INTERLEUKIN-8 (FRAGMEN LARGE SUBUNIT OF TERMI CYTOCHROME B-245, BETA CHEMOKINE EXODUS. RADIAL SPOKEHEAD. CYTOKINE. PUTATIVE EPIMERASE/DEH RNA POLYMERASE II LARG FAST MYBP-C. LOW-DENSITY LIPOPROTEI V-SERA 1.
777777777777777555555555555555555555555		3.55e+01 3.55e+01 3.55e+01 3.55e+01	3.55e+01 3.55e+01 3.55e+01				, , , , , , ,		1.90e+00 1.90e+00 1.90e+00 1.90e+00 1.90e+00 2.93e+00 2.93e+00 4.49e+00 4.49e+00 6.86e+00

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RESULT 1
1 Q14745
1D Q14745
AC Q14745;
DT 01-NOV-1996 (TREMBLREL. 01, CREATED)
DT 01-NOV-1996 (TREMBLREL. 01, LAST SEQUENCE UPDATE)
DT 01-NOV-1996 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
DT 01-NOV-1996 (TREMBLREL. 08)
DT 1SSUB-BRAIN;
RA SEQUENCE FROM N.A.
RC TISSUB-BRAIN;
RA ISHIZUKA K., IGATA-YI R., NARUSE K., NAKASHIMA H., OHUC RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., IIO M., MRA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., IIO M., MRA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., IIO M., MRA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., IIO M., MRA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., IIO M., MRA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., IIO M., MRA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., IIO M., MRA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA RA KATSURAGI S., KIN Y., OHMOTO Y., NOMIYAMA H., OHUC RA RA KATSURAGI S., KI
RESULT
AC OLD
AC OLD
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Matches 1
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015467 1
015467;
01-JAN-1998 (
01-JAN-1998)
01-NOV-1998
                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
HEDRICK J.A., HELMS A.,
SUBMITTED (NOV-1997) TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                   HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JAN-1998 (TREMBLREL. 05, 01-JAN-1998 (TREMBLREL. 05, 01-NOV-1998 (TREMBLREL. 08, 1L-10-INDUCIBLE CHEMOKINE. ILINCK OR SCYALS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUBMITTED (AUG-1995) TO EMBL/GENBANK/DDBJ DATA BANKS EMBL; D63785; G961440; -.
                                                                                                                                                                               YOSHIE O., NOMIYAMA H.;
   SUBMITTED
                                                                                                                                                BIOCHIM. BIOPHYS.
                                                                                                                                                                                                                                              TISSUE-LIVER;
                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                        MAMAYIMON
                                                                                                                             \overline{\omega}
                                                        EQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity nes 10; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             65 QVCADPSEEWVQ
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of a region of 181 kb containing five CC (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94.6%;
larity 83.3%;
Conservative
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2
                                                                                                                                                0:0-0(1998)
                                                                                                                                                                                                                                                                                                                               GORMAN D., ZLOTNIK A.;
EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                           FUKUDA S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    023316
Q56939
Q15497
P91312
Q13018
Q28733
Q10466
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 87; DB 4; I
Pred. No. 2.41e-06;
2; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
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180 KD SECRETORY PHOSP
TITIN (FRAGMENT).
TITIN, HEART ISOFORM N
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SLOW MYBP-C.
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                                                                                                                                                                                                           MIURA
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M., MIURA R.,
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Matches
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Best Local Similarity
Matches 7; Conser
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WARDELLI B., PIPPALLA V., GE
GENTZ R., GAROTTA G.;
J. EXP. MED. 0:0-0(0).
EMBL; U85768; G1916252; -.
PFAM; PF00048; 118; 1.
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009002 PREL1
009002;
01-JUL-1997 (TREM
01-JUL-1997 (TREM
01-NOV-1998 (TREM
01-NOV-1998 (TREM
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01-JUL-1997
01-NOV-1998
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MUS MUSCULUS (MOUSE).

EUKARYOTA; METAZOA; CHORDATA; VE
ECTUROGNATHI; MURIDAE; MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 [4]
SEQUENCE
TISSUE-THYMUS;
TANABE S., LU Z., LUO Y., QUACKENBUSH E.J., BERMAN M.A., COLLINS-RACIE L.A., MI S., REILLY C., LO D., JACOBS K.A. SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS. [2]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Isolation and characterization monocyte chemoattractant human (activity.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATARRHINI; HOMINIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HOMO SAPIENS
EUKARYOTA; ME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MPIF-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BIOCHEM. BIOPHYS. RES. COMMUN. 247:217-222(1998). EMBL; U91746; G2581781; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE; 98308096.
YOUN B.S., ZHANG S.,
HANGOC G., KWON B.S.;
                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                  72 QFCGDPKQEWVQ 83 ::|:|| :||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     74 EVCTNPNDDWVQ
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AF088219; G3719365; -.
AF055467; G3395776; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NS (HUMAN).
METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TREMBLREL.)
(TREMBLREL.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120 AA;
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(TREMBLREL. 0
(TREMBLREL. 0
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llarity 50.0%;
Conservative
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larity 58.3%;
Conservative
                                                                                                                                                                                                                                                                                                   PRELIMINARY;
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13119
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04, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
E A21 (TCA4).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 72; DB 4; L
Pred. No. 4.70e-03;
4; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Pred. No. 8.89e-05;
6; Mismatches (
                                                                                                                                                  VERTEBRATA;
                                                                                                                                                                                                                                                                                                   PRT;
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chemokine, with myelosup;
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THOTAKURA
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PARMELEE
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                                                                                                                                                    EUTHERIA;
                                    K.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EUTHERIA;
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                                      DORF
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RESULT
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Best Local
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Q98158 PRELIMINARY;
Q98158; 012599;
01-FBB-1997 (TREMBLREL. 0:
01-JUL-1997 (TREMBLREL. 0:
01-NOV-1998 (TREMBLREL. 0:
0RF K6,
KAPOSI'S SARCOMA-ASSOCIAT:
VIRUSES; DSDNA VIRUSES, N
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O09006;
01-JUL-1997 (TREMBLREL. 0
01-AUG-1998 (TREMBLREL. 0
01-NOV-1998 (TREMBLREL. 0
BETA CHEMOKINE EXODUS-2.
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TISSUE=TOTAL PETUS;
MEDLINE; 97444139.
MEDLINE; 97444139.
MEDLINE; 97644139.
MEDLINE; 97644139.
MEDLINE; 97646139.
MEDLINE; 97
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SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AF006637; G2209189; -.
EMBL; AF001980; G2624927; -.
MGD; MGI:1097677; SCYA21.
PFAM; PF00048; i18; 1.
SEQUENCE 133 AA; 14558 MW; C0532523 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS EMBL; U88322; G3109697; -.
MGD; MGI:1097677; SCYA21.
PFAM; PF00048; 118; 1.
SEQUENCE 133 AA; 14600 MW; B34A5E22 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOW
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HROMAS R.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MUS MUSCULUS
EUKARYOTA; MI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Identification and characterization containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM
MEDLINE; 97400
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IMMUNOL. 159:2554-2558(1997).
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Best Local
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O00585;
01-JUL-1997 (TREMBLREL 04, CRE
01-JUL-1998 (TREMBLREL 08, LAS
01-NOV-1998 (TREMBLREL 08, LAS
BETA CHEMOKINE EXODUS-2.
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; V
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SUN R., LIN S.-F., MILLER G.
SUBMITTED (SEP-1996) TO EMBL
EMBL; U75698; G1718266; -.
EMBL; U74585; G1658273; -.
EMBL; U93872; G2246546; -.
EMBL; U71366; G3351763; -.
EMBL; U71366; G3551763; -.
EMBL; U71366; G3551763; -.
EMBL; U71366; G3551763; -.
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RUSSO J.J., BOHENZKY R.A.,
PARRY J.P., PERUZZI D., EDE
SUBMITTED (OCT-1996) TO EME
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MOORE P.S., BASHOFF C.
"Molecular mimicry of
SEQUENCE FROM N.A. HROMAS R.A., GRAY P., SUBMITTED (JUN-1997)
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NICHOLAS J., RUVOLO V.R.,
HENDRICKSON S., GUO H.G.,
SUBMITTED (NOV-1996) TO EX
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                                                                                     CATARRHINI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NEIPEL F., ALBRECHT J.C., FLECKENSTEIN B.;
"Cell-homologous genes in the Kaposi's sarcoma-associated human herpesvirus 8: determinants of its pathogenicity?";
J. VIROL. 71:4187-4192(1997).
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CE 274:1739-1744(1996).
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TO EMBL/GENBANK/DDBJ
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KLEMSZ M., FIFE K., TO EMBL/GENBANK/DDBJ
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., HAYWARD G.S., REITZ M.S.
EMBL/GENBANK/DDBJ DATA BANI
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EDELMAN I.S., CHAN
EMBL/GENBANK/DDBJ
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                                                                                                                                                                        CREATED)
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DDBJ DATA BANKS.
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Best Local
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Best Local
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                                                                                                                                                     O35188;
O35188;
O1-JAN-1998
O1-JAN-1998
O1-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             035933;
01-JAN-1998
01-JAN-1998
01-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ROSSI D., HARDIMAN G., COPELAND N., GILBER ZLOTNIK A., BAZAN J.F.;
SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ EMBL; U92565; G2459677; -.
FFAM; PF00048; 118; 1.
SEQUENCE 395 AA; 42040 MW; 3997A113 CR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAĞIRA M., IMAI T., HIESHIMA K., KUSUDA J., RIDANPAA M., MISHIMURA M., KAKIZAKI M., NOMIYAMA H., YOSHIE O.; SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; U88320; G2196920; -. EMBL; AF001979; G2624925; -. EMBL; AF001979; G2624925; -. EMBL; AB002409; D1022673; -. PFAM; PF00048; 118; 1. PFAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. HEDRICK J.A., ZLOTNIK A. SUBMITTED (MAY-1997) TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Identification and characterization of a novel beta chemokine containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    [2]
SEQUENCE FROM N.A.
MEDLINE; 97400322.
HEDRICK J.A., ZLOTNIK A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. STRAIN-BALB/C; TIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        035933
                                                            MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                                             SCYD1
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SEQUENCE FROM N.A
                                          SCIUROGNATHI; MURIDAE;
                                                                                                                                   NEUROTACTIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FRACTALKINE
                                                                                                                                                                                                                                                                                                                                                                                 73 FCADPKEKWVQ 83
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                                                                                                                                                   (TREMBLREL.
(TREMBLREL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (TREMBLREL. 05, CREATED)
(TREMBLREL. 05, LAST SEQUENCE UPDATE)
(TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                           73.9%;
larity 72.7%;
Conservative
                                                                                                                                                                                                                                                 PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       84
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COPELAND N., GILBERT D.J.,
                                          MURINAE;
                                                                                                                                                     08,05,
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                                                                                                                                                                                                                                                                                                                                                                                                                       Score 68; DB 11; Le
Pred. No. 3.18e-02;
                                                                                                                                                     CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
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Pred. No. 7.
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7.62e-03;
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                                                            MAMMALIA;
                                                                                                                                                     UPDATE)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 395;
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                                                               EUTHERIA;
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) O88430;
C O88430;
JT 01-NOV-1998 (TREMBLREL. 08, CARRATED)
DT 01-NOV-1998 (TREMBLREL. 08, LAST SEQUENCE UPDAY
DT 01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UP
DE CC CHEMORINE ABCD-1.
OS MUS MUSCULUS (MOUSE).
OS MUS MUSCULUS (MOUSE).
OS HUS MUSCULUS (MOUSE).
OS HUS MUSCULUS (MOUSE).
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Best Local Similarity
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Best Local
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PAN Y., CLARE L., HONG 2., DOLICH S., DEEDS J.
GOSSELIN M., MA J., DUSSAULT B., WOOLF B., ALP
GUTIERREZ-RAMOS J.C., GEARING D.;
"Neuroctactin, a membrane-anchored chemokine up
inflammation.";
NATURE 387:611-617(1997).
EMBL, AF010586; G2317698; -.
MGD; MGI:1097153; SCYD1.
PFAM; PF00048; 118; 1
SEQUENCE 395 AA; 42098 MW; E3CD0612 CRC32;
SEQUENCE FROM N.A.

MEDLINE; 98130629.

LEGLER D.F., LOETSCHER M., STUBER ROOS R., CLARK-LEWIS I.,

BAGGIOLINI M., MOSER B.;

"B cell-attracting chemokine 1, a human CXC chemokine expressed
lymphoid tissues, selectively attracts B lymphocytes via recommendations.

J. EXP. MED. 187:655-660(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ULT 11
043927; PRELIMINARY;
043927; (TREMBLREL.)
01-JUN-1998 (TREMBLREL.)
01-JUN-1998 (TREMBLREL.)
01-NOV-1998 (TREMBLREL.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Activated murine B lymphocytes and CC chemokine which acts selectively J. EXP. MED. 188:451-463(1998).
EMBL; AF052505; G3378116; -.
SEQUENCE 92 AA; 10302 MW; BC7219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 98353531.
SCHANIEL C., PARDALI E.,
SHIMIZU T., SEIDL T., ANI
SIDERAS P.;
                                                                                                                                                                                                                                                                                                                                                    HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CXC CHEMOKINE PRECURSOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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Local Similarity 72.7%;
les 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          73 FCADPKEKWVQ 83
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larity 63.6%;
Conservative
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ANDERSSON J., M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 67; DB 11; Len pred. No. 5.09e-02;
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Pred. No.
1; Misma
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No. 3.18e-02;
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on activated T cells.";
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MUS.
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ALPERIN A., C
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                                                                                 BLR1/CXCR5.";
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Matches 7; Conse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.

MEDLINE; 97177111.

BAZAN J.F., BACON K.B., HARDIMAN GREAVES D.R., ZLOTNIK A., SCHALL
"A new class of membrane-bound chem the second chem and the second chem and the second chem and the second chem arture 385:640-644(1997).
OB9093;
OB9093;
                                                                                                                                                                                                                                                                                                                             ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J., BRANDON R., KIM U.J., KERLAVRAGE A.R., VENTER J.C.;
"Homo sapiens Chromosome 16 BAC clone CIT987SK-A-152E5.";
SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U91835; G1899259; --
EMBL; U94487; G1888523; --
EMBL; AC004382; G352821; --
EMBL; AC004382; G352821; --
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01-MAY-1997 (TREMBLREL. 0
01-NOV-1998 (TREMBLREL. 0
CX3C CHEMOKINE PRECURSOR.
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P78423
PRELIMINARY;
P78423; 000672;
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EMBL: AJ002211; E1249325; -.
EMBL: AF044197; G2911376; -.
EMBL: AF029894; G3169814; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GUNN M.D., NGO V.N., ANSEL K.M., WILLIAMS L.T.; WILLIAMS E.T.; B-cell-homing chemokine made Burkitt's lymphoma receptor-1."; NATURE 391:799-803(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATARRHINI; HOMINIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
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                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                             SIGNAL
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ADAMS M.D., LOFTUS B.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL.
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                                                                                                                                      73 FCADPKEQWV
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                    PRELIMINARY;
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109
12664 MW;
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Pred. No. 1.
2; Mismatc
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Pred. No. 8.
2; Mismatc
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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CX3C CHEMOKINE.
; C8093D7D CRC32;
                    PRT;
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d. No. 8.11e-02;
Mismatches 3;
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                    97
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                                                                                                                                                                                             DB 4; L
1.29e-01;
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                                                                                                                                                                                                               Length 397;
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RESULT 14

ID 000626;

DT 01-JUL-1997 (
DT 01-JUL-1997 (
DT 01-VV-1998 (
DE MACROPHAGE-DE MACROPHAGE)
GN MDC OR A-152E (
OC CATARRHINI; HE RN [1]

RP SEQUENCE FROM RA GODISKA R., C RA MANTOVANI A., RI [2]

RP SEQUENCE FROM MED., RI [2]

RP SEQUENCE FROM MED., RI [3]

RP SEQUENCE FROM RA MENG T., BOOM RA CHANG M.S., b TO SEQUENCE FROM RA GODISKA R.), I RN [3]

RP SEQUENCE FROM RA MENG T., BOOM RA SUBMITTED (JU RN [3]

RP SEQUENCE FROM RA ADAMS M.D., I RA BRANDON R., r THOMO SAPIENS SUBMITTED (JU DR EMBL; U83171.)

DR EMBL; U83171.1

RA SIGNAL.

FT CHAIN

SQ SEQUENCE 93
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Best Local Similarity
Matches 6; Conse
Query Match
Best Local Similarity
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SEQUENCE
                                                                                                                                                           SEQUENCE FROM N.A.
ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J.,
BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.;
"Homo sapiens Chromosome 16 BAC clone CIT9875K-A-152E5.";
SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
CHANG M.S., MCINKCH J., ELIAS III C., MANTHEY C.
MENG T., BOONE T., ANDREW D.P.;
MENG T., BOONE T.)
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA B
                                                                                                                                                                                                                                                                                                                      GODISKA R., CHANTRY D., I
MANTOVANI A., GRAY P.W.;
J. EXP. MED. 185:0-0(0).
                                                                                                                                                                                                                                                                                                                                                                                                                                         MACROPHAGE-DERIVED CHEMOKINE MDC OR A-152E5.1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
EUKARYOTA; MURIDAE; MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-NOV-1998 (TREMBLREL 08, 01-NOV-1998 (TREMBLREL 08, 01-NOV-1998 (TREMBLREL 08, CC CHEMOKINE ST38 PRECURSOR
                                                                                                                               EMBL; U83171; G1931581; -. EMBL; U83239; G2062425; -.
                                                                                                                                                                                                                                                                                                                                                                                                            HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                CATARRHINI; HOMINIDAE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'A novel rat CC chemokine, identified by targeted differential display, is upregulated in brain inflammation."; NEUROIMMUNOL. 0:0-0(1998).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          74 VCADPKQNWV
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                                                                                                    PF00048; il8;
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7 (TREMBLREL.
8 (TREMBLREL.
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.larity 60.0%;
Conservative
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                                                                                                                 G3252820;
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                                            10580
 68.5%;
72.7%;
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97
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
 Score 63;
Pred. No.
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LAST SEQUENCE UPDATE)
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Pred. No. 2.04e-01;
3; Mismatches 1
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CC CHEMOKINE ST38
053405BD CRC32;
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                                         POTENTIAL.
MACROPHAGE-DERIVED CHEMOKINE
65EA63D2 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                              VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                                                                                                                    C.J.,
                                                                                                                                                                                                                                                                                                                                                    SOZZANI
 DB 4; I
3.21e-01;
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MUS.
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             Length 93;
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RESULT 15

ID Q8157;
AC Q98157;
AC Q98157;
DT 01-FEB-1997
RA MEDLINE; 970
RA MEDLINE; 971
RA MOORE P.S., 1
RT "NOLECULAT m.
RT "SEQUENCE FROJ
RX MEDLINE; 971;
RA MOORE P.S., 1
RT "NUCLECTION
RY MEDLINE; 971;
RA PARRY J.P., 1
RA PARRY J
                                                                                                                Query Match
Best Local
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                                                                                       Matches
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RUSSO J.J., I
PARRY J.P., 1
                                                                                                                                                                                       SEQUENCE FROM N.A.

SUN R., LIN S.-F., MILLER G.;
SUBMITTED (SEP-1996) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U67775; G1562496; -.
EMBL; U75698; G1718264; -.
EMBL; U75698; G1718264; -.
EMBL; U71365; G3551760; -.
FFAM; PF00048; 118; 1.
HYPOTHETICAL PROTEIN.
SEQUENCE 94 AA; 10486 MW; 91312200 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOORE P.S., BASHOFF C., WEIS
"Molecular mimicry of human
genes by KSHV.";
SCIENCE 274:1739-1744(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KAPOSI'S SARCOMA-ASSOCIATED HERPES-LIKE VIRUS,
AND KAPOSI'S SARCOMA-ASSOCIATED HERPESVIRUS.
VIRUSES; DSDNA VIRUSES, NO RNA STAGE; HERPESVI
GAMMAHERPESVIRINAE; RHADINOVIRUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEIPEL F., ALBRECHT J.C., FLECKENSTEIN B. "Cell-homologous genes in the Kaposi's sa human herpesvirus 8: determinants of its J. VIROL. 71:4187-4192(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. MEDLINE; 97296220.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROC. NATL. ACAD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P. "Nucleotide sequence of the Kaposi sarcoma-associated he (HYG).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE; 97094384.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NICHOLAS J., RUVOLO V.R., BURNS W.H., SANDFORD G., WI
HENDRICKSON S., GUO H.G., HAYWARD G.S., REITZ M.S.;
SUBMITTED (SEP-1996) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM
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                                                                                                             Local
        QVCADKSKDWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EICADPRVPWV
                                                                                     Similarity 6; Conse
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P. (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ., BOHENZKY R.A.,
., PERUZZI D., ED
(OCT-1996) TO EM
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(TREMBLREL.
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                                                                                       Conservative
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                                                                                                          66.3%;
54.5%;
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EDELMAN I.S., CHANG Y., MOORE
EMBL/GENBANK/DDBJ DATA BANKS.
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uman cytokine and
                                                                                  Score 61; D. Pred. No. 7.3; Mismatcl
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LAST SEQUENCE UPDATE)
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                                                                                  Mismatches
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., REITZ M.S.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HERPESVIRIDAE;
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                                                                            )B 1.
/.87e-01;
2;
                                                                                                                                         DB 14;
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ts pathogenicity?";
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cytokine
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                                                                                                                                      Length 94;
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MOORE P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                response
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.S.;
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.S.;
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ID P97884;

AC P97884;

DT 01-MAY-1997

DT 01-MAY-1997
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Q67634;
Q67634;
Q1-NOV-1996 (TREMBLREL. 01, CO1-NOV-1996 (TREMBLREL. 01, IO1-NOV-1998 (TREMBLREL. 08, IO1-NOV-1998 (TREMBLREL 08, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ULT 16
057411;
057411;
057411;
01-JUN-1998 (TREMBLREL. C)
01-JUN-1998 (TREMBLREL. C)
01-JUN-1998 (TREMBLREL. LYMPHOTACTIN PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; U34966; G1185444;
PFAM; PF00048; i18; 1.
NON_TER 1 1 1
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ARCHOSAURIA; AVI
NEOGNATHAE; GALLIFORMES; PHASIANIDAE; PHASIANINAE; GALLUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GALLID HERPESVIRUS TYPE VIRUSES; DSDNA VIRUSES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ROSSI D.L., BAZAN J.F., ZLOTNIK A.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ
EMBL; AF006742; G2827882; -.
                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Isolation and characterization of Marek's disease virus (MDV) cDNAs mapping to the BamHI-I2, BamHI-Q2, and BamHI-L fragments of the MDV genome from lymphoblastoid cells transformed and persistently infects
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SHIRAZI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE; 96074534.
PENG Q., ZENG M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VIRUSES; DSDNA VIRUSES, NO RNA STAGE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  with MDV.";
VIROLOGY 213:590-599(1995).
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                                                                                                                                                                                                                                         145 VCVDPEAPWVQ 155
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                                                                                                                                                                                                                                                                                                Similarity 6; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                  203
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  (TREMBLREL.
                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                          66.3%;
larity 54.5%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BHUIYAN Z.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 54.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                  23132 MW;
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97
  03,
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                                                                                                                                                                                                                                                                                       Score 61; DB 14;
Pred. No. 7.87e-01;
1; Mismatches 4
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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LYMPHOTACTIN.
3290101C CRC32;
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Pred. No. 7.87e-01;
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                                                                                  PRT;
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Best Local
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Best Local Similarity 60.0%;
Matches 6; Conservative
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073912;
073912;
01-AUG-1998
01-AUG-1998
01-AUG-1998
                     LT 20
001768; PRELIMINARY; PRT; 2180 AA.
001768;
01-JUL-1997 (TREMBLREL 04, CREATED)
01-JUL-1997 (TREMBLREL 04, LAST SEQUENCE UP
01-NOV-1998 (TREMBLREL 08, LAST ANNOTATION
SIMILARITY TO EGF-LIKE DOMAINS.
T21E3.3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JTANS-
LESSIAUER W.;
"A novel rat CC chemokine, ide
display, is upregulated in bra
display, is upregulated in bra
display, is upregulated in bra
display.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GALLUS GALLUS (CHICKEN).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
STRAIN-SPRAGUE-DAWLEY;
KELNER G.S., MACIEJEWSKI-LENOIR D., LEE E.
SUBMITTED (FEB-1997) TO EMBL/GENBANK/DDBJ
CAENORHABDITIS ELEGANS
                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ EMBL; Y14971; E1295103; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-NOV-1998 (TREMBLREL.
CC CHEMOKINE EXODUS.
RATTUS NORVEGICUS (RAT).
EUKARYOTA; METAZOA; CHOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     X60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PFAM; PF00048; il8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            UTANS-SCHNEITZ U.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. STRAIN-FISHER 344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SCIUROGNATHI; MURIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NEOGNATHAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ISSUE=MACROPHAGE LIKE;
                                                                                                                                                                                                                                                                      75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73 VCADPKQIWV 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NEUROIMMUNOL. 0:0-0(1998)
BL; U90447; G1899246; -.
BL; AF053312; G3551817; -.
                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                               1 EICADPSEEWV 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N
                                                                                                                                                                                                                                                                      EVCLDPTAPWV
                                                                                                                                                                                                                                                                                                                                                                                              21
104 /
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 (TREMBLREL. 0
8 (TREMBLREL. 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GALLIFORMES;
                                                                                                                                                                                                                                                                                                          65.2%;
llarity 54.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                AΑ;
                                                                                                                                                                                                                                                                      85
                                                                                                                                                                                                                                                                                                                                                                                            20 F
104 K
11199 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE-BRAIN;
LOREZ H., KLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10875 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07,
07,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ,80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PATA; VERTEBRATA; ARCHOSAURIA; AVES; PHASIANIDAE; PHASIANIDAE; GALLUS.
                                                                                                                                                                                                                                                                                                    Score 60; DB 13; Leny
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  identified by targe brain inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 60;
Pred. No.
2; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                POTENTIAL.
K60 PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KLINKERT W.E.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERTEBRATA;
E; RATTUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3FC09DD8 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                              40C2EF8A CRC32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . No. 1.22e+00;
Mismatches 2
                                                                               SEQUENCE UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         104
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MAMMALIA; EUTHERIA; RODENTIA;
                                                            UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DA SILVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MAKI R.A.;
A BANKS.
                                                                                                                                                                                                                                                                                                                                                   Length 104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 96;
                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                          0;
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                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                          0,
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RESULT OF RESULT
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Best Local S
Matches
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043646;
01-JUN-1998
01-JUN-1998
01-NOV-1998
CHAIN
SEQUENCE
                                                                                           PROSITE;
SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEAR S., DU Z., DURBIN R., FAVELLO A., FULTON L., GARDNER A.,
HAWKINS T., HILLIER L., JIER M., JOHNSTON L., JONES M., KERSHA
KIRSTEN J., LAISTER N., LATREILLE P., LIGHTNING J., LLOYD C.,
MCMURRAY A., MORTINORE B., O'CALLAGHAN M., PARSONS J., PERCY C
RIFKEN L., ROOPRA A., SAUNDERS D., SHOWNKEEN R., SMALDON N., S
SONNHAMMER E., STADEN R., SULSTON J., THIERRY-MIEG J., THOMAS
VAUDIN M., VAUGHAN K., WATERSTON R., WATSON A., WEINSTOCK L.,
WILKINSON-SPROAT J., WOHLDMAN P.;
                                                                                                                                                   SUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ EMBL; AF043341; G2905632; -. EMBL; AF088219; G3719366; -.
                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
JANG J.S., KIM B.E.;
SUBMITTED (JAN-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
                                                              SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATARRHINI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RANTES PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GLYCOPROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PSO1186; EGE_2; 7.
PROSITE; PSO1209; LDLRA_1; 10.
PFAM; PF00057; Idl_recept_a; 1
PFAM; PF00058; Idl_recept_b; 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS EMBL; AF003133; G2088683; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
STRAIN-BRISTOL N2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "2.2 Mb of contiguous elegans.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WILSON R., AINSCOUGH R.,
BURTON J., CONNELL M., C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-BRISTOL N2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EUKARYOTA; METAZOA; NEMATODA; SECERNENTEA; RHABDITIA; RHABDITIDA;
RHABDITINA; RHABDITOIDEA; RHABDITIDAE; PELODERINAE; CAENORHABDITI
                                                                                                                                                                                                                                        Structure of a region
                                                                                                                                                                                                                                                                           NOMIYAMA H.;
                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WATERSTON R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUBMITTED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN-BRISTOL N2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NATURE 368:32-38(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE; 94150718
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ω
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                                                                                                                       PS00472;
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م
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91
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(TREMBLREL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HOMINIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
ΑA;
                                                                                                                       SMALL_CYTOKINES_CC;
   9990
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91
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nucleotide sequence from chromosome
                                                                                                                                                                                                                                               of 181 kb
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   ₹.
                                                                                                                                                                                                                                                                                                                                                                   EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        866
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 60; D
Pred. No. 1.
2; Mismatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CREATED)
LAST SEQUENCE UF
LAST ANNOTATION
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CF404FAD CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                               containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 5; L.
1.22e+00;
2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ₹
                                                                                                                                                                                                               DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        UPDATE)
                                                                                                                                                                                                                                               five
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COULSON A., C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 2180;
                                                                                                                                                                                                                                               G
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EUTHERIA;
                                                                                                                                                                                                                                               chemokine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SMITH
                                                                                                                                                                                                                                        genes.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GREEN P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIMATES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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Best Local
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              P95531 .I
P95531;
P95531;
O1-MAY-1997
O1-MAY-1997
O1-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   062812;
062812;
062812;
01-AUG-1998;
01-AUG-1998;
01-AUG-1998;
                                                                                                                                                                                                    FUKUMORI F., SAINT C.P.;

"Nucleotide sequences and regulational analysis of genes conversion of aniline to catechol in Pseudomonas putida UCC22(pTDN1).";

J. BACTERIOL. 179:399-408(1997).

EMBL; D85415; D1013489; -.

PROSITE; PS00570; RING_HYDROXYL_ALPHA; 1.

PFAM; PF00848; Ring_hydroxyl_A; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUBMITTED (APR-1998) TO EMBL/GENBANK/DDBJ DATA BANKS EMBL; AF062377; G3126973; -.
NON_TER 97 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EQUUS CABALLUS (HORSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA;
PERISSODACTYLA; EQUIDAE; EQUUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01 MAY-1997 (TREMBLREL. 03, CREATED)
01-MAY-1997 (TREMBLREL. 03, LAST SEQUENCE UPDATE)
01-WAY-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
LARGE SUBUNIT OF TERMINAL DIOXYGENASE.
                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BACTERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TDNA1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-UCC22;
                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PSEUDOMONAS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PSEUDOMONAS PUTIDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE=BRONCHOALVEOLAR TISSUE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INTERLEUKIN-8
                                           385 LCNSPEDEWVD 395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                75 EVCLNPHTKWVQ 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
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  ICADPSEEWVQ
                                                                                                             Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROTEOBACTERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97 AA; 10742 MW;
                                                                                                                                                                          448 AA; 50510 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (TREMBLEEL. 07, CREATED)
(TREMBLEEL. 07, LAST SEQUENCE UPDATE)
(TREMBLEEL. 07, LAST ANNOTATION UPDATE)
-8 (FRAGMENT).
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llarity 50.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     64.1%;
larity 41.7%;
Conservative
                                                                                    64.1%;
larity 45.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAMMA SUBDIVISION;
                                                                                    Score 59; DB 2;
Pred. No. 1.90e+00
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 59; DB 6; 1
Pred. No. 1.90e+00;
2; Mismatches '
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Pred.
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                                                                                                                                                                          9F019DF8 CRC32;
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No. 1.90e+00
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PSEUDOMONAS GROUP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 97;
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                                                                                    ω,
                                                                                                                           Length 448;
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Best Local Similarity
Matches 7; Conser
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Best Local Similarity
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046178; PRELIMIAGA...,
046178; O46178; O46178; O46178; O46178; O46178;
01-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
01-JUN-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
RADIAL SPOKEHEAD.
STRONGYLOCENTROTUS PURPURATUS (PURPLE SEA URCHIN).
STRONGYLOCENTROTUS PURPURATUS (PURPLE SEA URCHIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.

BJORGVINSDOTTIR H., ZHEN L., D
BJORGVINSDOTTIR H., ZHEN L., D
BJORGVINSDOTTIR 
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Q99664;
Q99664;
O1-MAY-1997 (TREMBLREL. 0
O1-MAY-1997 (TREMBLREL. 0
O1-NOV-1998 (TREMBLREL. C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CYTOCHROME B-245, BETA POLYPEPTIDE

Q103

Q2000

Q2
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EMBL; U64197; G1778717; --
PROSITE: PS00472; SMALL_CYTOKINES_CC;
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HOMO SABLENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA;
SCIUROGNATHI; MURIDAE; MURINAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-PANCREAS;
MEDLINE; 97275143.
HROMAS R., GRAY P.W., CHANTRY
BELL G.I., TAKEDA J., ARONICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CYBB.
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SEQUENCE 95 AA; 10691 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KLEMSZ M.J.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          72 VCANPKQTWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 ICADPSEEWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 EICADPSEEW 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 58; DB 4; I
Pred. No. 2.93e+00;
3; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 59; DB 11;
Pred. No. 1.90e+00
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1526B4C0 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERTEBRATA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GODISKA R., GORDON M., (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             M.C.;
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COOPER S., BROX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EUTHERIA;
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Q90825;
Q1-NOV-1996
Q1-NOV-1996
Q1-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                         LT 28
069128 PRELIMINARY; PRT; 321 AA.
069128;
01-8UG-1998 (TREMBLREL. 07, CREATED)
01-AUG-1998 (TREMBLREL. 07, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL. 07, LAST ANNOTATION UPDATE)
PUTATIVE EPIMERASE/DEHYDRATASE WBIG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE-BONE MARROW;
PETRENKO O., ENRIETTO P.J.;
SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS
EMBL; L34552; G509594; -.
PFAM; PF00048; 118; 1.
SEQUENCE 96 AA; 11115 MW; FC581424 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GINGRAS D., GAGNON C.;

Molecular cloning and characterization of a of sea urchin sperm axonemes: involvement of regulation of sperm motility.";

MOL. BIOL. CELL 9:513-522(1998).

EMBL; U73123; G2905895; -..

SEQUENCE 552 AA; 62723 MW; 898CFCCC CRC32
                                                                                                                         DESHAZER D., BRETT P.J., WOODS D.E.;
SUBMITTED (MAY-1998) TO EMBL/GENBANK/DDBJ DATA :
EMBL; AF064070; G3135686; -.
SEQUENCE 321 AA; 34852 MW; F0196B82 CRC32;
                                                                                                                                                                                                                                                                                                                                                             WBIG.
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ARCHOSAURIA; AVES;
NEOGNATHAE; GALLIFORMES; PHASIANIDAE; PHASIANINAE; GALLUS.
                                                                                                                                                                                                                       STRAIN-1026B;
                                                                                                                                                                                                                                                                                              BURKHOLDERIA.
                                                                                                                                                                                                                                                                                                                BURKHOLDERIA PSEUDOMALLEI
BACTERIA; PROTEOBACTERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. MEDLINE; 98119758.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              / Match 62.0%;
Local Similarity 54.5%;
nes 6; Conservative
37 VCAEGVSEWVH 47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73 FCVDPAEGWFQ 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 40.0%; les 4; Conservative
                                                               Local
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                                       Similarity 45.5%; 5; Conservative
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6 (TREMBLREL.
8 (TREMBLREL.
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                                                               62.0%;
45.5%;
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01,
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                                       Score
Pred.
3; M
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Pred.
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Pred.
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                                       re 57; DB 2; Le
d. No. 4.49e+00;
Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         e 57; DB 13; Lei
. No. 4.49e+00;
Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ,58; DB 5; Lengu
No. 2.93e+00;
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Best Local S
Matches
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Best Local Similarity 41.7%;
Matches 5; Conservative
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FAST MYBP-C,
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
EUKARYOTA; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   014324
014324;
014324;
01-NOV-1996
01-NOV-1996
01-NOV-1998
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p91819
p91819
01-MAY-1997 (TREMBLREL 03, CREATED)
01-MAY-1997 (TREMBLREL 03, CREATED)
01-MAY-1997 (TREMBLREL 07, LAST SEQUENCE UPDATE)
01-AUG-1998 (TREMBLREL 07, LAST ANNOTATION UPDATE)
RNA POLYMERASE II LARGE SUBUNIT (FRAGMENT).
ZELDIA PUNCTATA.
                                                                                                                                                                                                                                                                                                                                                  "Complete sequence of human fast-type and slow-type muscle myosin-binding-protein C (MyBP-C). Differential expression, domain structure and chromosome assignment."; EUR. J. BICCHEM. 216:661-669(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BALDWIN J.G., GIBLIN-DAVIS R.M., EDDLEMAN C.D., VIDA J.T., THOWAS W.K.; SUBMITTED (JUN-1996) TO EMBL/GENBANK/DDBJ DATA EMBL; U61763; 61778038; -...
                                                                                                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
TISSUE-SKELETAL MUSCLE CELL TYPE;
MEDLINE; 93387319.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
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CEPHALOBINA; CEPHALOBOIDEA; CI
                                                                                                                                                                                                                                                                                                   PFAM; PF00041; fn3; 3
PFAM; PF00047; ig; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WEBER F.E., VAUGHAN K.T., REINACH F.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                     775
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                                                                                                                   EYCLEGSEEWV 785
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                                                                       EICADPSEEWV
                                                                                                                                                                                       Similarity
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629 AA;
                                                                                                                                                                                                                                                            1142 AA;
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                                                                                                                                                                 Conservative
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71787
                                                                                                                                                                                     62.0%;
                                                                                                                                                                                                                                                            128142 MW;
1 07:40:03 1999
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                                                                                                                                                            Score 57;
Pred. No. '
1; Mismat
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Pred. No. 4.49e+00;
3; Mismatches 4
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Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Thu Apr. 1 07:43:33 1999; MasPar time 2.82 Seconds 68.937 Million cell updates/sec

Tabular output not generated.

Title: >US-08-927-939-13
Description: (1-12) from USO8927939.pep
Perfect Score: 97
Sequence: 1 EICADPKOKWIQ 12

Scoring table: PAM 150
Gap 15

Searched: 131922 seqs, 16180660 residues

Post-processing: Minimum Match 0% Listing first 100 summaries

Database: a-geneseq32

a-geneseq32
1:part1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7
8:part8 9:part9 10:part10 11:part11 12:part12 13:part13
14:part14 15:part15 16:part16 17:part17 18:part18
19:part19 20:part20 21:part21 22:part22 23:part23
24:part24 25:part25 26:part26 27:part27 28:part28
29:part29

Statistics: Mean 18.472; Variance 64.336; scale 0.287

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match Length	ngth DB	ID	Description
1	95	97.9	66 24	W13598	Monocyte chemoattract
2	95	97.9	67 24		
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o	95	97.9	76 15	R87680	Monocyte
7	95	97.9	76 21	W11131	Mature human monocyte
œ	95	97.9	76 5	R28660	MCF.
v	95	97.9	76 1	P90292	Peptide from human
10	95	97.9	76 14	R87675	(28-Asp) MCP-1.
11	95	97.9	76 20	W09374	Monocyte chemotactic
12	95	97.9	76 10	R53398	Sense MCP-1
13	95	97.9	76 14	R87677	(3-Ala) MCP-1.
14	95	97.9	76 14	R87676	(24-Arg) MCP-1
15	95	97.9	77 15	R86859	Mature MCP-1.
16	95	97.9	99 5	R28663	MCF.
17	95	97.9	99 2	P95387	Human monocyte
18	95	97.9	ברפפ	870800	Chomout+1001+01+010+0

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lung disease.
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20-DEC-1996.
19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
(LEWI/) LEWIS I.
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19-JUN-1995; 152141.
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(LEWI/) LEWIS I
Gong J, Lewis I;
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The present sequence represents an analogue, MCP-1 (10-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the N-terminal amino acids 1-9 of MCP-1, acts as an antagonist of MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammation sites. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared with 75:1 for prior art mutant 7ND.
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Monocyte chemoattractant protein analogue MCP-1 (10-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                        Monocyte chemoattractant protein analogue MCP-1 (11-76).
Truncated monocyte chemoattractant protein-1; inhibitor;
receptor binding; anti inflammatory; basophil; lymphocyte; allergy;
chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                          W13599 standard; peptide; 67 AA.
W13599;
07-NOV-1997 (first entry)
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Compared the present sequence represents an analogue, MCP-1 (11-76), of monocyte compared the present sequence represents an analogue, which lacks the compared tractant protein-1 (MCP-1). The analogue, which lacks the compared to the present and inhibits binding to a MCP-1 compared to the compared
                                                                                                                                                       Pri anti-inflammatory agent
Claim 7: Page 5: 27pp; English.

CC The present sequence represents an analogue, MCP-1 (9-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the CC N-terminal amino acids 1-8 of MCP-1) acts as an antagonist of MCP-1 (as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 creceptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into CC inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared CC with 75:1 for prior art mutant 7ND.

So Sequence 68 AA;
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19-JUN-1995; C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gong J, Lewis I; WPI; 97-165844/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       lung disease.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (LEWI/) LEWIS
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1 EICADPKQKWIQ
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11; Conser
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llarity 91.7%;
Conservative
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CA-152141.
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Score 95; DB 24;
Pred. No. 8.74e-03;
1; Mismatches 0
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1; M
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No. 8.74e-03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis.

Claim 4; Page 11; 22pp; English.

Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28-Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1999.

Cundernoing corronary arresvent restenosis, e.g. in patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 11; Conser
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anti-inflammatory agent claim 5; Page 5; 27pp; English.
The present sequence represents an analogue, MCP-1 (8-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the N-terminal amino acids 1-7 of MCP-1, acts as an antagonist of MCP-1
                                                                                                                                                                                                                                                                                                                                                     19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
(LEWI/) LEWIS I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Monocyte chemoattractant protein analogue MCP-1 (8-76), Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 W13596 standard; peptide; W13596; 07-NOV-1997 (first entry)
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07-NOV-1994; U12874.

12-NOV-1993; US-152301.

(DAND ) DANA FARBER CANCER INST INC.

ROllins B, Zhang YJ;

WPI; 95-215051/28.
                                                                                                                                                                                                     N-terminally truncated monocyte chemo:attractant prolacks MCP-1 activity and inhibits receptor binding,
                                                                                                                                                                                                                                                                                       Gong J, Lewis I; WPI; 97-165844/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CA2152141-A.
20-DEC-1996.
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monocyte chemoattractant protein; MCP-1;
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llarity 91.7%;
Conservative
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5..45
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Pred. No. 8.74e-03;
1; Mismatches 0
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ng, useful
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PR 0.55 PR 0.5
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Matches 1
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25-FEB-1997.
05-OCT-1992; 956862.
05-OCT-1992; US-956863.
05-OCT-1992; US-956863.
29-APR-1994; US-235659.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-SEP-1994; J01512.
13-SEP-1993; JP-227385.
(TORA) TORAY IND INC.
Matsushima K, Naruto M;
WPI; 95-131181/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       wound treatment using monocyte chemotactic factor - has potent therapeutic effect on skin wounds and ulcers
Disclosure; Page 12; 22pp; Japanese.
The invention relates to a new remedy for curing wounds which, instead of comprising a growth factor, comprises a monocyte chemotactic activating factor (MCAF) or its variants or derivatives. The factor has potent effect on skin wounds and ulcers. The present sequence is human MCAF, the activity of which is exemplified as the new remedy.

Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     receptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammation sites. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared with 75:1 for prior art mutant 7ND.
                                                                                                                                                                                                                                                                                                                                                                                                                          W11131 standard; protein; 76 AA. W11131; 10-JUN-1997 (first entry)
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23-MAR-1995.
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R87680 standard; protein;
                                                                                                                                             US5605671-A.
                                                                                                                                                                                                                                                                                                          Mature human monocyte chemoattractant protein-1 (MCP-1). MCP-1; mature chemoattractant protein-1; cytokine; interleukin-8; IL-8; neutrophil activating peptide; labelling; imaging; targetin radionuclide; infection; inflammation; neoplasm; atheromatous les
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Monocyte chemotactic activating factor for use as wound remedy. monocyte chemotactic activating factor; MCAF; wound remedy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-MAR-1996 (first entry)
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                                                                                                                                                                                                  misc_difference
                                                                                                                                                                                                                                                                                     restenosis.
                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             y Match 97.9%;
Local Similarity 91.7%;
hes 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      43 eicadpkqkwvq
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91.78;
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Pred. No. 8.74e-03;
1; Mismatches 0
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Pred. No. 8.74e-03;
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Best Local
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W09219737-A.

12-NOV-1992.

27-APR-1992; J00550.

09-MAY-1991; JP-135950.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      targetted delivery of radioactive agent
Example 10; Column 19-20; 15pp; English.
W11131 represents mature human monocyte chemoattractant protein-1
(MCP-1). MCP-1 was radionuclide labelled and used in a method for
imaging a target site in vivo in an animal. Labelled MCP-1 was allowed
to accumulate at a target site (having MCP-1 receptors) in the animal
and detected so as to image the target site. Any Cys-Cys or Cys-Xaa-Cys
chemokine carrying either iodine-123 or iodine-131 can be used in the
method. Especially preferred is neuronial activating peptide-2 (NAP-2)
which recognises interleukin-8 receptors and is labelled with
technetium-99m, indium-111 copper-62, rhenium-186 or rhenium-188.
The method can be used for imaging a site of infection, inflammation,
                                             17-JAN-1990 (first entry)
Peptide from human glioma cell line U-10
Glioma; leucocyte; chemotaxis; neoplasms
                                                                                                                                                                                                                                                                                                              Elcoli strains
Claim 1; Page 48 + Page 36; 56pp; English.
An expression plasmid, pHM483, for producing MCF(76) consisting of 76 amino acids was constructed. The prod. can be used for e treating bacterial infectious diseases.
                                                                            P90292 standard; peptide; 76
P90292;
17-JAN-1990 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                         N-PSDB; Q30745-46.
Prodn. of polypeptide(s) having monocyte chemotactic activity using expression plasmids with E. coli elements and specific
                                                                                                                                                                                                                                                                                                                                                                                                                                      (DAIN ) DAINIPPON PHARM CO LTD.
Fukui T, Matsuo N, Yamada M, Yamagishi
WPI: 92-398864/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kunkel
WPI; 97
Key
modified_site
                                Human.
                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RBS; promoter; tryptophan; repressor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Plasmid; monocyte chemotactic factor; MCF; translation; termination; terminator; initiation; ribosome binding site;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MCF.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 neoplasm, atheromatous lesion or restenosis.
Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-MAR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Radio:labelling neutrophil-activating peptide(s) - for imaging
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MLCW ) MALLINCKRODT MEDICAL INC.
(UNMI ) UNIV MICHIGAN.
Kunkel SL, Lyle LR, Strieter RA
                                                                                                                                                                                                                            97.98;
Local Similarity 91.78;
hes 11; Conservation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          50 eicadpkqkwvq 61
                                                                                                                                                                                          50 eicadpkgkwvg 61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      h 97.9%;
Similarity 91.7%;
11; Conservative
                                                                                                                                                                                                                                                                                                   76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                 Location/Qualifiers
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                                                               cell line U-105MG
                                                                                                                                                                                                                                    Pred.
                                                                                                                                                                                                                                                    Score 95; DB 5; I
Pred. No. 8.74e-03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 95; DB 21;
Pred. No. 8.74e-03;
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                             밁
                                                                                                                Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are protein-1 (MCP-1) derivs. - are reapable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis Claim 3; Page 11; 22pp; English.

CC that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the cubstitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations care: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 cand Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

CC The peptides can be used to prevent restenosis, e.g. in patients cudergoing coronary artery angioplasty.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 97.9%;
Best Local Similarity 91.7%;
Matches 11; Conservative
                                                        Query Match 97.9%;
Best Local Similarity 91.7%;
Matches 11; Conservative
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20-JUL-1989; 030423.
31-JAN-1989; US-304234.
31-JAN-1989; US-304234.
(USSH) US Dept. of Health and H
YOShimura T; Robinson E; Appell.
WPI; 89-263501/36.
                                                                                                                                                                                                                                                                                                                                                                                          W09513295-A1.
18-MAX-1995.
07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    disulfide_bond disulfide_bond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (28-Asp) MCP-1.
monocyte chemoattractant protein; MCP-1; mutant; restenosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R87675 standard; protein; 76 R87675;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; page 3; 46pp; English.
Peptide is derived from glioma cell line U-105MG (ATCC CRL9932) or from leukocytes and has mol. wt. 8400. Used to treat infections and neoplasms. Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                             Rollins B, Zhang YJ; WPI; 95-215051/28.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New peptide with specific chemotactic activity for monocytes from glioma or leucocyte cells, useful for treating infections
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                            50 eicadpkqkwvq 61
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11..36
12..52
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/note= "pyroglutamic acid"
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   12
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Pred. No. 8.74e-03
                                                                       Score 95; DB 14;
Pred. No. 8.74e-03;
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lla E; Leonard E.
                                                           Mismatches
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05-NOV-1996.
22-CCT-1992; 965678.
22-CCT-1992; US-965678.
27-MAY-1994; US-250958.
(UNMI) UNIV MICHIGAN.
Kunkel SL, Lyle LR, Strieter RM;
WPI; 96-505405/50.
                                                                                                                                                                                                                                                                    28-APR-1994.
20-OCT-1993; U10074.
22-OCT-1992; US-965678.
(MLCW ) WALLINCKRODT MEDICAL II
Lyle LR;
WPI; 94-151314/18.
wPI; 94-151314/18.

Anti-sense monocyte chemotactic protein-1 oligo:nucleotide(s) and peptide(s) - is used for inhibiting, treating or imaging areas of percular restences or potential restences.

Disclosure; Page 5; 42pp; English.

The sequences given in R53398-99 represent sense and antisense monocyte chemotactic protein-1 (MCP-1) respectively. These
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Anti-sense Monocyte Chemotactic Protein-1 oligo:nucleotide(s) - useful for therapy or diagnosis of restenosis, etc.
Disclosure; Column 13-14; 16pp; English.
This is the amino acid sequence of the human monocyte chemoattractant protein (MCP)-1, a member of the C-C chemokine family. MCP-1 is a potent stimulator of monocyte chemotaxis and is produced by injured vascular smooth cells thus attracting monocytes and macrophages which infiltrate the injured area and release growth factor. This causes proliferation of the vascular smooth cells resulting in restenosis. The gene sequence can be used to generate antisense sequences e.g. T4803-7, which can be used to inhibit in vitro MCP-1 prodn. by mononuclear cells e.g. lymphocytes or macrophages, or smooth muscle cells, esp. in order to prevent vascular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_difference
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sense MCP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R53398 standard;
R53398;
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Human; monocyte chemoattractant protein; antisense; inhibition; mononuclear cell; lymphocyte; macrophage; smooth muscle cell;
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Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients
                                                                 LT 14
R87676 standard; protein; 76 AA.
R87676;
21-FEB-1996 (first entry)
(24-Arg) MCP-1.
monocyte chemoattractant protein;
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ROllins B, Zhang YJ:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - a capable of inhibiting the monocyte chemo-attractant activity capable of inhibiting the monocyte chemo-attractant activity capable of inhibiting the monocyte chemo-attractant activity capable of inhibiting the monocyte chemo-attractant protein-1 (MCP-1) derivs. - a capable of inhibiting the monocyte chemo-attractant protein-1 (MCP-1) derivs. - a capable of inhibiting the monocyte chemo-attractant protein-1 (MCP-1) derivs. - a capable of inhibiting the monocyte chemo-attractant activity capable of inhibiting the mono
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76 AA;
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Pred. No. 8.74e-03;
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disulfide_bond 12.52
w09513295-A1.
18-MAY-1995.
07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC.
ROllins B, Zhang YJ;
WPI; 95-215051/28.
Disclosure; Page 5; 50pp; English.

This sequence represents the mature form of monocyte chemotactic protein-1 (MCP-1). MCP-1 is a member of the "C-C" family of chemoattractant cytokines or chemokines. It is a potent stimulator of monocyte chemotaxis and has an extemely high degree of specificity for this cell type. MCP-1 is produced by injured vascular smooth muscle cells and attracts the monocytes and macrophages which infiltrate the area, releasing growth factors and resulting in proliferation of vascular smooth muscle and restenosis. Nucleic acid molecules which are antisense to the MCP-1 mRNA may be used to inhibit translation of MCP-1 and so may be useful for inhibiting vascular restenosis, partic. following balloon angioplasty or a related process. The molecule may be radiolabelled to increase its therapeutic effect or for imaging areas of potential
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Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28 Tyr by Leu and/or 30 Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 New anti:sense oligo:nucleotide(s) and peptide(s) for inhibiting restenosis - are directed against C-C family cytokine(s) such a monocyte chemotactic protein, opt. radio:labelled for therapy or
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13-JAN-1995; U00605.
14-JAN-1994; US-182917.
(MLCW ) MALLINCKRODT MEDICAL
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WPI; 95-263703/34.
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76 AA;
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11..36
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Pred. No. 8.74e-03;
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Best Local Similarity
"~+~hes 11; Conserv
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Best Local
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                                                                                                          US7330446-A.
25-JUL-1989; 330446.
30-MAR-1989; US-330446.
(USSH) US Dept. Health a
Yoshimura T, Robinson EA
WPI; 89-300683741.
N-PSDB; N91337.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       An expression plasmid, pHMC076 for producing MCF(76) consisting of 76 amino acids was constructed. DNA encoding MCF(76) was prepd. using a recombinant plasmid pHMCF7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-NOV-1992.
27-APR-1992; J00550.
09-MAY-1991; JP-135950.
(DAIN ) DAINIPPON PHARM CO LTD.
Fukui T, Matsuo N, Yamada M, Yamagishi
WPI; 92-398864/48.
                                               Human derived monocyte cl
glioma cell line U-105MG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human monocyte chemo-attractant peptide-1.
Human monocyte chemo-attractant peptide; inflammatory disease;
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P95387 standard; protein; !
P95387;
P95387;
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Prodn. of polypeptide(s) having monocyte chemotactic activity using expression plasmids with E. coli elements and specific E. coli strains
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R28663 standard; Protein;
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                    Disclosure;
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ilarity 91.7%;
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24..99
/label= mat_protein
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Pred. No. 8.74e-03
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                                                                                                                                                                                     Leonard
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Best Local Similarity
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Best Local
                                      Homo sapiens.

W09509232-A.

06-APR-1995.

28-SEP-1994; CA0516.

28-SEP-1993; US-127499.

(SHAR/) SHARMA L R.

(VALS/) VAN ALSTYNE D.
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09-FEB-1995.
26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Screening for cpds. with anti-heparanase activity - by detecting inhibition of heparin or heparan sulphate degradation, potentially useful for treating arthritis, restenosis, cancer. Claim 13: Page 49: 60pp; English. Purified heparanases, prepared under reducing conditions and activated with transglutaminase, are given in R70786-804. Most are prepared by reverse transcription of RRNA from activated human leukocytes, then cloning of the cDNA into pVL1392 baculovirus vector, and expression in Sf9 cells in the presence of reduced glutathione and dithiothreitol.
                                                                                                                                                                                                                                                                                                                                                        Human monocyte chemoattractant factor hMCP-1.
Human monocyte chemoattractant factor; hMCP-1; chemokine; vaccine; meningitis related homologous antigenic sequence; MRHAS; RV-1; immunoassay; diagnosis; treatment; prophylactic; bacterial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IT 19
R73914 standard; protein;
R73914;
05-DEC-1995 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chemoattractant protein MCP-1.
MCP-1; chemoattractant; heparanase; heparin; heparan sulfate; arthritis; restenosis; cancer; wound healing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This is a human-derived monoyte chemo-attractant peptide (MCP-1) sequence MCP-1 exhibits optimal chemotactic activity at a concn. of 1nM and has a mol. mass of c.a. 8,400 D. MCP-1 can be used for treating infection eg inflammatory disease, or for the control of neoplasms by accumulation of monocytes at the site of the infection. The corresp. DNA is obtd. by chemical synthesis, by screening reverse trascripts of mRNA from purified blood leukocytes or cell cultures of eg U-373 MG or KMG-5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (UPJO ) UPJOHN CO.
Hoogwerf AJ, Ledbe
WPI; 95-082239/11.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73 eicadpkqkwvq
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Van Alstyne D;
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larity 91.7%;
Conservative
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Pred.
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Pred. No. 8.74e-03;
1; Mismatches 0
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.. No. 8.74e-03;
...no. e.74ches 0;
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Best Local
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23-FEB-1996; WO-U02598.
23-FEB-1996; WO-U02598.
(HUMA-) HUMAN GENOME SCI INC.
Adams M. Alderson R. Applebaum E
Parmelee D. White J;
WPI; 97-435153/40.
diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoissis and generates antibodies. Labelled Ck betall can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, prostaglandin dependent fever and bone with the silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck betall cDNA can be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
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Drol3+ chemokine betal0 or monocyte chemotactic protein 4 variant. Human; chemokine betal0; Ck betal0; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4;
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Claim 47; Fig 8/10; 88pp; English.

R73914 is the chemokine Human monocyte chemoattractant factor hMCP-1.

It contains the meningitis related antigenic sequences (MRHAS) claimed in R73895 and R73907, which are recognised by a monoclonal antibody from the hybridoma Rubella virus (RV)-1. The claimed MRHAS peptides may be used in immunoassays to diagnose the presence of bacterial and/or viral meningitis agents in a sample, or in prophylactic and therapeutic meningitis treatments. The peptides may also be used as
                                                                                                                                                                                                                                                                                                                                                                                                      Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or The present sequence is human chemokine beta10 which can monocyte chemotactic protein 4 (MCP-4) Drol3+ variant, which can be used to treat deficient in Ck beta10, while a Ck beta10 beta10 can be used to reduce excessive levels of Ck beta10 beta10 can be used to treat leukaemia, solid tumours, chronic or beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Polypeptide encoding chemokine beta 4 protein 4 - useful to treat tumours, a asthma and fibrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New peptide(s) and corresp. antibodies for the treatment of meningitis - the peptide(s) corresp. to homologous antigenic sites on bacterial and viral agents and on chemokine(s), used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   vaccines against meningitis.
NB: Identified by matching c
Sequence 99 AA;
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91.7%;
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Pred. No. 8.74e-03;
1; Mismatches C
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Query Match 93.8%; Best Local Similarity 83.3%; Matches 10; Conservative

Score 91; DB 27; Le Pred. No. 2.31e-02; 2; Mismatches 0;

Length 71;

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PPR 22:
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Best Local :
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28-AUC-1997.
23-FEB-1996; U02598.
23-FEB-1996; WO-U02598.
                                                                                                                                               19-MAR-1998 (first entry)

Bac 2 chemokine betal0 or monocyte chemotactic protein 4 variant. Human; chemokine betal0; Ck betal0; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative 41-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                         diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck betail can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck betail cDNA can be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               asthma and fibrosis
Example 11; Fig 5; 83pp; English.
The present sequence is human chemokine beta10 (Ck beta10) or
monocyte chemotactic protein 4 (MCP-4) Bac 3 variant, which can k
used to treat patients deficient in Ck beta10, while a Ck beta10
antagonist can be used to reduce excessive levels of Ck beta10. Ce
beta10 can be used to treat leukaemia, solid tumours, chronic or
opportunistic infections, autoimmune diseases, asthma, fibrotic
                                                                                                             fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bac 3 chemokine beta10 or monocyte chemotactic protein 4 variant. Human; chemokine beta10; Ck beta10; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy;
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W22673 standard; Protein;
W22673;
19-MAR-1998 (first entry
                                                              Homo sapiens.
WO9731098-A1.
                                                                                                                                                                                                                    W22672;
19-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Adams M, Alderson R, Applebaum Parmelee D, White J; WPI; 97-435153/40.
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23-FEB-1996; U02598.
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                                                                                                leukaemia; MCP-4;
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EICADPKQKWIQ
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10; Conservative
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Pred. No. 2.31e-02;
2; Mismatches 0;
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        Example 11; Fig 5; 83pp; English.

Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Droll/2 variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 can be used to reduce excessive levels of Ck beta10. Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoiesis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or treat rheumatoid arthritis, autoimmune, chronic inflammatory and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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Example 11; Fig 5; 83pp; English.

Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine betal0 (Ck betal0) or monocyte chemotactic protein 4 (MCP-4) Bac 2 variant, which can 1 used to treat patients deficient in Ck betal0, while a Ck betal0 antagonist can be used to reeduce excessive levels of Ck betal0 antagonist can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic opportunistic infections, autoimmune diseases. It also
                                                                                                                                                                                                                                                                            (HUMA-) HUMAN GENOME SCI INC.

Adams M, Alderson R, Applebaum E, Li H, Li Y, Lima SH,

Parmelee D, White J;

WPI; 97-435153/40.

Polypeptide encoding chemokine beta 4 and monocyte chemotactic

protein 4 - useful to treat tumours, autoimmune disease, infect

asthma and fibrosis

Example 11: F1-F-F-F-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopolesis and generates antibodies. Labelled Ck betail can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-oosinophilic syndrome, lung inflammation and atherosclerosis. Ck betail cDNA can be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Droll/2 chemokine betal0 or monocyte chemotactic protein 4 variant. Human; chemokine betal0; Ck betal0; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopolesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein 4; leukaemia; MCP-4; Droll/2 variant.
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23-FEB-1996; WO-U02598.
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Adams M, Alderson R,
Parmelee D, White J;
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Local Similarity 83.3%;
nes 10; Conservation
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Pred. No. 2.31e-02;
2; Mismatches 0
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Example 11; Fig 5; 83pp; English.

C The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Bac 1 variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 Can be used to treat leukaemia, solid tumours, chronic or Cc opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also compounds for labelled Ck beta10 can be used to dientify its cognate compounds for (ant)agonist activity. The antagonist can be used to creeptor, while cells expressing the receptor can be used to compounds for (ant)agonist activity. The antagonist can be used to creeptor the used to can be used to compounds for (ant)agonist activity. The antagonist can be used to creeptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to compound the compound that it is autoimmune, chronic inflammatory or constructions.
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IT 25
W17665 standard; peptide; 82 AA.
W17665;
16-DEC-1997 (first entry)
Stem cell mobilising chemokine CKbeta-10.
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23-FEB-1996; WO-U02598.
(HUMA-) HUMAN GENOME SCI INC.
Adams M, Alderson R, Applebaum E, Li
Parmelee D, White J;
WPI; 97-435153/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy; chromosome identification; monocyte chemotactic protein leukaemia; MCP-4; Bac 1 variant.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                bone marrow failure, silicosis, sarcoidosi syndrome, lung inflammation and atheroscle be used to isolate genes encoding similar and for chromosome identification.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Polypeptide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infection,
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Bac 1 chemokine betal0
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1 EICADPKQKWIQ 12
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Local Similarity 83.3%;
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Pred. No. 2.31e-02;
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atherosclerosis. Ck betal0 cDNA
ng similar peptides, in gene ther
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No. 2.
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                                               colony stimulating factor;
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antagonist;
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Claim 7; Page 11-12; 24pp; English.

CC of mobilishing stem cells. The chemokine can be used therapeutically to improve stem cell mobilisation, optionally together with a colony stimulating factor or other haematoregulatory agent. It can be used wherever an increased level of haematoregulatory agent. It can be used concrete infection in the immune response to chronic infection (particularly bacterial or parasitic), to promote wound healing, in (transplant) patients with reduced bone marrow function as a result of immunosuppressive treatment or disease, and to provide more rapid regeneration of bone marrow after treatment for neoplastic or viral classes. The induced stem cells may be harvested for subsequent return to the patient, optionally after they have been genetically manipulated co-administered with a cytotoxic drug.
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Best Local Similarity
Matches 10; Conser
N-PSDB; 79 2: 17150.

New chemokine Ck(beta)-4 and -10 genes and polypeptide(s) - useful to treat, e.g. leukaemia, solid tumours and auto-immune diseases Claim 19; Fig 2; 53pp; English.

A novel human chemokine, Ck beta-10 (R93087), was identified as the product of a cDNA clone (T17050) isolated from a 9-wk early human tissue cDNA library. The protein is structurally related to the chemokine family. Recombinant Ck beta-10 can be obtd. by incorporating the cDNA into a vector and expression of the protein in e.g. E. coli, COS or Sf9 cells. Ck beta-10 can be used to treat in e.g. E. coli, COS or Sf9 cells. Ck beta-10 can be used to treat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human chemokine beta-10: Chemokine beta-4; Ck beta-10; Ck beta-4; Cytokine; leukaemia; tumour; cancer; autoimmune disease; ps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     T 26
R93087 standard; Protein;
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Kreider BL, Li H, Pelus L, White JR;
WPI; 97-258956/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               neoplastic disease;
Synthetic.
WO9715594-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                           29-FEB-1996.
23-AUG-1994; U09484.
23-AUG-1994; WO-U09484.
08-SEP-1994; ZA-006936.
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23-OCT-1996; U16959.
24-OCT-1995; US-006051
                                                                                                                                                                                                                                                                                                                                                        WPI; 96-151145/15.
                                                                                                                                                                                                                                                                                                                                                                                           Adams MD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-AUG-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       asthma; allergy; wound healing; diagnosis; therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ten new chemokine(s) able to mobilise stem cells -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          haematoregulator; immune response; bacterial infection; transplant;
                                                                                                                                                                                                                                                                                                                                                                                                                        (HUMA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                56 eicadpkekwvq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 EICADPKQKWIQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /label= Sig_peptide 25..98
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Pred. No. 2.31e-02;
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                                                                                                                          Claim 1; Page 36-37; 47pp; English.

This polypeptide comprises human macrophage-derived monocyte chemotactic protein-5 (MCP-5), a novel C-C chemokine. Its amino acid sequence was deduced from a cDNA clone (see 190880 and 190883) isolated from a human macrophage cDNA library. A claimed method for producing MCP-5 comprises culturing a host cell that is stably transformed or transfected with MCP-5 polynucleotide. Also claimed is a hybridoma that produces a monoclonal antibody (MAD) that is specifically reactive with the mature MCP-5. MCP-5 (or its analogues and fragments) is used to enhance the immune response in cases of reagments) is used to enhance the immune response in cases of suseful as anti-inflammatories in cases of e.g. arthritis and Crohn's disease, also for treatment of atherosclerosis, angiogenesis and tumour growth (or metastasis). The MCP-5 inhibitors can possibly also be used to reduce the damaging effects of chemo- and radio-therapy on myeloid progenitor cells, and to inhibit replication of HIV. MCP-5 can also be used to identify its cognate receptor, while MCP-5 peptides (or the analogues or receptors) are used to modulate MCP-5 activity and to identify Sequence 98 AA;
                                                             Query Match 93.8%;
Best Local Similarity 83.3%;
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 93.8%;
Best Local Similarity 83.3%;
Matches 10; Conservative
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(ICOS-) ICOS CORP.
GODÍSKA R. Gray PW;
WPI; 97-489645/45.
N-PSDB; 190880.
Polynnol -----
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colony formn.
Sequence 98
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Monocyte chemotactic protein 5, MCP-5; human; macrophage;
chemokine; inhibitor; antiinflammatory; atherosclerosis;
crohn's disease; arthritis; anglogenesis; tumour; metastasis;
therapy; diagnosis; medical imaging.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               T 27
W30191 standard; Protein;
W30191;
21-MAY-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Polynucleotide encoding monocyte chemotactic protein-5 - useful in treatment of e.g. inflammation, atherosclerosis, anglogenesis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAR-1997; U04898
27-MAR-1996; US-6228
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               to regulate haematopoiesis, promote wound healing, and to inhibit angiogenesis. It can also be used to inhibit bone marrow stem cell
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tumours
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EICADPKQKWIQ 12
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/note= "(Claim 4)"
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                                83
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                                                            Score 91; Di
Pred. No. 2.:
2; Mismatcl
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Pred. No. 2.31e-02;
2; Mismatches 0
                                                                 Mismatches
                                                                             DB 28;
2.31e-02;
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                                                                                           Length 98;
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RESULT
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Best Local S
Matches 1
                                                                                                                                                                                                                                                                                                                                                                                                                   Prolipertide encoding chemokine beta 4 and monocyte chemotactic protein 4 - useful to treat tumours, autoimmune disease, infection, asthma and fibrosis

Claim 1; Fig 2; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4), which can be used to treat patients deficient in Ck beta10, while a Ck beta10 antagonist can be used to reduce excessive levels of Ck beta10. Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopolesis and generates antibodies.

Chaelied Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat freumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck beta10 cDNA can be used to isolate genes encoding similar peptides, in gene therapy and for chromosome identification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9731098-A1.
28-AUG-1997.
23-FEB-1996; U02598.
23-FEB-1996; WO-U02598.
(HUMA-) HUMAN GENOME SCI INC.
Adams M, Alderson R, Applebaum E, L
Parmelee D, White J;
WPJ: 97-43553/40.
                                                                                                                                                                             R06398 stand:
R06398;
14-DEC-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human chemokine beta10 or monocyte chemotactic protein 4. Human; chemokine beta10; Ck beta10; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy;
 WO9007863-A.
26-JUL-1990.
                                                                                                                                          Human MCF precursor.
Monocyte chemotactic factor; antibacterial; antitumour; cancer
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19-MAR-1998
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W22670 standard; Protein; 98
                                                misc_difference
                                                                                                protein
                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
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leukaemia; MCP-4.
                                                                                                                                                                                                                                                                            72 eicadpkekwvg 83
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1 EICADPKQKWIQ 12
                                                                                                                                                                                                             standard; protein; 99
                                                                                                                                                                                                                                                                                                                                            n 93.8%;
Similarity 83.3%;
10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                            98 AA;
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                                                                                                                                                                            (first entry)
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24..98
/label= mat_peptide
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1..23
                                                                                                             Location/Qualifiers
                                 /label=A or T
                                                                /note="Claim 1"
                                                                                 /label-mature
                                                                                                                                                                                                                                                                                                                                          Score 91;
Pred. No.
2; Misma
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, 2.31e-02;
--+ches 0;
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RESULT
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Search completed: Thu Apr
Job time : 23 secs.
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Provided the protein homologous to human MCP-1 - for provided the protein homologous to human MCP-1 - for provided the provided the protein homologous to human MCP-1 - for provided the provided to prepare a cDNA in the expression vector lambda gtll. 1.5 x 10(5) cDNA clones were screened with a polyclonal anti-P6 antiserum of monospecific immunoglobulin G and six positives were identified. The insert of a suitable cDNA clone, pH42, was cloned into pUC18 and sequenced. Chemoattractant (bMCP-1), which is a homologue of human (h)MCP-1. There is 72% overall AA sequence homology to hMCP-1 with the signal peptide showing 100% and the central region showing 89% homology. Sequence 76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human monocyte chemotactic factor type polypeptide and DNA encoding it - useful as antibacterial and antitumour agents. Sc Claim 2; Page 25; 27pp; English.

The sequence was deduced from the DNA sequence determined from three recombinant plasmids, pHMCF7, pHMCF25 and pHMCF29 which were isolated from a cDNA library propd. From RNA extracted from thuman promyelocytic leukaemia cell line, HL-60 (ATCC CCL-240).

The protection in plasmids pHMCF3 and pHMCF29 bases 105 and 226 were T and G resp; in pHMCF25 they were C and a resp. The AA at posn.

To of the precursor protein is therefore not determined and may be either Ala or Thr. The protein may be produced by recombinant but the protein and is useful as a drug for treatment of certain bacterial infectons and cancers.
                                                                                                                                                                                                                                               Query Match 92.8%;
Best Local Similarity 83.3%;
Matches 10; Conservative
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Best Local Similarity
Matches 10; Consei
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DE4125251-C.

03-SEP-1992.

31-JUL-1991; 125251.

31-JUL-1991; DE-125251.

(SCHA-) SCHAPER & BRUEMMER GMBH & CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R26580;
28-JAN-1993 (first entry)
Sequence of bovine P6 protein.
Monocyte chemoattractant; bovine P6-derivative; thrombosis; tumour;
inflammation therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-JAN-1990; U00004.
01-JAN-1989; JP-000065.
03-FEB-1999; JP-026438.
(USDC ) US SEC OF COMMERCE.
Furtani Y, Fukui T, Junichi Y, Masaaki Y, Matsushima Oppenheim J;
wPI; 90-253802/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gramm W, Lins E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               T 30
R26580 standard; Protein; 76 AA.
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ilarity 83.3%;
Conservative
                             1 07:43:56 1999
                                                                                                                                                                                                                                               Score 90; DB 5; Length 76; Pred. No. 2.94e-02; 2; Mismatches 0; Indels
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## SUMMARIES

Result	Score	% Query Match	Length	DB		Description	Pred. No.
1	95	97.9	99	2	A60299	monocyte chemoattract	4.69e-08
2	94	96.9	99	N	JC2136		85e-
ω	90	•	99	ν	A39296		6.07e-07
4	90	•	99	ν	JC2336	monocyte chemoattract	6.07e-07
· UI	89		125	2	146857	monocyte chemoattract	1.01e-06
on.	88	•	109	N	A54678	monocyte chemotactic	1.67e-06
7	86	88.7	99	N	JC2417	monocyte chemoattract	4.56e-06
œ	86		120	N	148147	monocyte chemoattract	4.56e-06
9	84	•	97	N	JC4912	eotaxin - human	1.23e-05
10	82	84.5	95	N	JN0841	interleukin-8 - dog	3.31e-05
11	82		96	N	JC2478	eotaxin - rat	3.31e-05
12	82	84.5	96	N	148099	eotaxin precursor - g	3.31e-05
13	82	84.5	101	N	146997	interleukin-8 - sheep	3.31e-05
14	82	•	101	N	S42496	interleukin 8 - sheep	3.31e-05
15	82	84.5	103	2	A53096	interleukin-8 precurs	3.31e-05
16	82		103	2	A44253	alveolar macrophage c	3.31e-05
17	81	83.5	92	N	I52322	macrophage inflammato	5.41e-05
18	80	82.5	99	N	JC5295	monocyte chemotactic	80
19	79	81.4	101	2	146871	interleukin-8 - rabbi	1.43e-04
20	78	80.4	148	N	A30209	PDGF-inducible JE gly	2.32e-04
21	77	79.4	89	N	A53497	pre-B-cell growth-sti	٠.
22	77	79.4	89	N	I53416	interleukin-8 homolog	3.76e-04
23	77	79.4	93	2	181182	cytokine - mouse	3.76e-04

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                                                                                                                                                                                                                                                                                                                                                                                                                                                               #title Human monocyte chemoattractant protein-1 (MCP-1). Full-lend CDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE.
#cross-references_MUID:89153605
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##molecule_type mRNA
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                                                                #journal
                                                                                                                                                                                                                                        #authors Yoshimura, T.; Leonard, E.J.
#journal Adv. Exp. Med. Biol. (1991) 305:47-56
#title Human monocyte chemoattractant protein-1 (MCP-1).
#cross-references_MUID:92095166
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##cross-references GB:M30816; GB
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                                                                                                                                           ##cross-references GB:S71513;
                                                                                                                                                                                                         ##status
                                                                                                                                                                                                                                                                                                                                              ##cross-references GB:X14768; NID:g34513; PID:g34514
##experimental_source glioma cell line U-105MG
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The human homolog of the JE gene encodes a monocyte secretory
                                                                Int. J. Cancer (1990) 45:795-797
                                                                                                        Bottazzi, B.;
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FEBS Lett. (1989) 244:487-493
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20-Feb-1993 #sequence_revision 20-Feb-1993 #text_change
                                         chemoattractant
chemoattractant expressed in human sarcoma cells (tumor-derived chemotactic factor, TDCF) is identical to monocyte chemoattractant protein-1/monocyte chemotactic
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FEATURE
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#map_posttion 17q11.2-17q12
CLASSIFICATION #superfamily macrophage inflammatory protein
KEYWORDS cytokine; glycoprotein; inflammation; pyroglu
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J.F.; Kolattukudy, P.E.
#journal Mol. Cell. Blochem. (1933) 126:61-68
#title The expression of monocyte chemotactic protein (MCP-1)
human vascular endothelium in vitro and in vivo.
#cross-references MUID:94150478
#accession 157488
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Biochem. Biophys. Res. Commun. (1990) 167:904-909

Hittle Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel N-terminally processed form.

#cross-references_MJID:90211336
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#title Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF).

#cross-references MUID:89165862

#accession A32300
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#formal_name Bos primigenius taurus #common_name cattle
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Porcine luteal cells express monocyte chemoattractant
protein-1 (MCP-1): Analysis by polymerase chain reaction
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#formal_name Sus scrofa domestica #common_name domestic
00-sep-1993 #sequence_revision 20-Aug-1994 #text_change
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UC2136; S57498
                         Gene expression and cDNA cloning identified a major basic protein constituent of bovine seminal plasma as bovine monocyte-chemoattractant protein-1 (MCP-1).
                                                                       Wempe, F.; Henschen, A.; Scheit, DNA Cell Biol. (1991) 10:671-679
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                            #authors Yoshimura, T.; Yuhki, N.
#journal J. Immunol. (1991) 146:3483-3488
#title Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and expression in spleen cells.
#cross-references_MUID:91225489
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##residues 50-68,'X',70-74,'X',76 ##label WE2
##experimental_source seminal vesicle
##experimental_source seminal vesicle
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##residues 1-99 ##label WEM
##rross-references GB:M84602; GB:M85264; NID:g163394; PID:g163395
#ecession B39296
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Similarity 83.3%;
10; Conservative
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Similarity 83.3%;
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26/1;
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monocyte chemoattractant protein-1 - bovine
#formal_name Bos primigenius indicus #common_name zebu c
20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change
03-May-1996
                                                                                                                                                                                                                                                                                                                                                                                                                   26/1; 65/2 #superfamily macrophage inflammatory protein #length 99 #molecular-weight 11114 #checksum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein-1 gene.
JC2336
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monocyte chemoattractant protein-1
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Characterization of the bovine monocyte
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                   I46857
                                                                                                                                                                    14-Feb-1997
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#length 99 #molecular-weight 11114 #checksum
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#product monocyte chemoattractant protein 1 #status
predicted #label MAT\
 preliminary; translated
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Pred. No. 6.07e-07
2; Mismatches
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2; N
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(1994) 202:1272-1279
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                                                                                                                                                                                                                               ne GDB:SCYA7; SCYA6; MCP-3
##cross-references GDB:138473; OMIM:158106
ap_position 17q11-17q12
htrons 36/1; 75/2
                                                                                                                                                                                                                                                                                                                                ##residues 1-109 ##label MIN
##cross-references EMBL:X71087; NID:q288396; PID:q288397
This protein induces proteinnase secretion and chemon macrophages and monocytes.
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Local Similarity 90.9%;
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Minty, A.; Chalon, P.; Guillemot, J.C.; Raghad, M.; Liauzun, P.; Magazin, M.; Miloux, B.; Minty, C.; Ramond, P.; Vita, N.; Lupker, J.; Shire, D.; Ferrara, P.; Caput, D. submitted to the EMBL Data Library, March 1993

Molecular cloning of MCP-3: a human monocyte-derived monocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          monocyte chemotactic protein 3 precursor -
monocyte chemoattractant protein MCP-3
#formal_name Homo sapiens #common_name man
28-Oct-1994 #sequence_revision 28-Oct-1994
24-Sep-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                  S32222
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Speleman, F.; Laureys, G.; Van Damme, J.
Genomics (1994) 21:403-408
The human McP-3 gene (SCVA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome
                                                                                                                                                                                             #superfamily macrophage
cytokine; glycoprotein;
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A54678
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                                                                                            #domain signal sequence #status predicted #label product monocyte chemotactic protein 3 #status predicted #label MATV #binding_site carbohydrate (Asn) (covalent) #stat
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  90.7%;
83.3%;
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Score
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Pred. No. 1.01e-06;
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  N 88
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  DB 2; L
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                  Length 109;
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#title cDNA cloning of guinea pig monocyte chemoattractant protein-1
#cross-references MUID:93267104
#cross-references MUID:93267104
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#title
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##residues 1-120 ##label RES
##cross-references GB:L04985; NID:g349820;
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##experimental_source corpus luteum
#TICATION #superfamily macrophage inflammatory
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##residues 1-99 ##label
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                             71 EVCADPTQKWVQ 82
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EICADPKQKWIQ 12
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monocyte chemoattractant protein-1 - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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llarity 75.0%;
Conservative
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JC2417
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Biochem. Biophys. Res. Commun. (1994) 205:148-153

Porcine luteal cells express monocyte chemoattractant

protein-2 (MCP-2): Analysis by cDNA cloning and northern
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JC2417 *type complete monocyte chemoattractant protein-2 · pig from tractant protein-2 · pig stormal_name Sus scrofa domestica *common_name 24.Feb-1995 *sequence_revision 24.Feb-1995 *tex
                                                                                                                      #superfamily #length 120
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                                                                                                                                                                                                                            preliminary;
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                                                                           88.7%;
75.0%;
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                                                                                                                      macrophage inflammatory
#molecular-weight 13741
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Pred. No. 4.56e-06;
2; Mismatches 1;
                                                                          Score 86; DB 2; L
Pred. No. 4.56e-06;
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##molecule_type DNA
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##cross-references EMBL:275668; NDD:g1531982; PID:e251275; PII
##cross-references EMBL:275668; NDD:g1531982; PID:e251275; PII
##experimental_source dermal fibroblast
This protein has eosinophil specific chemotatic activity
FICATION #superfamily macrophage inflammatory protein
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Local Similarity 66.7%;
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JC2478 #type complete eotaxin - rat eotaxin - rat formal_name Rattus norvegicus #common_name
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Cloning of a canine gene homologous
interleukin-8-encoding gene.
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                                                                                                                                                                                                                                       22/1; 67/2
#superfamily beta-thromboglobulin
#length 95 #molecular-weight 106
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#formal_name Canis lupus familiaris #common_name dog
19-May-1994 #sequence_revision 19-May-1994 #text_change
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No. 1.23e-05;
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Best Local Similarity 81.8%;
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#title
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[FICATION #superfamily macrophage inflammatory protein
#length 96 #molecular-weight 10753 #checksu
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Local Similarity 81.8%;
hes 9; Conservative
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J. Exp. Med. (1995) 181:1211-1216

Constitutive and allergen-induced expression
                                                               I46997 #type complete
interleukin-8 - sheep
#formal_name Ovis sp. #common_name sheep
21-Feb-1997 *sequence_revision 21-Feb-1997
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#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
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JC2478
 Seow, H.F.; Yoshimura,
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Biochem. Blophys. Res. Commun. (1994) 205;788-794
Eotaxin: Cloning of an eosinophil chemoattractant cytokine
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#product eotaxin #status predicted #label MAT\
#binding_site carbohydrate (Thr) (covalent) #status
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Pred. No. 3.31e-05;
1; Mismatches 1;
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Pred. No. 3.31e-05;
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 Wood, P.R.; Colditz,
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#title Cloning, sequencing, expression and inflammatory activity in skin of ovine interleukin-8.
#cross-references MUID:95137691
#accession I46997
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##residues 1-103 ##label LIN
##cross-references GB:M86923; NID:g164520; P
##CICATION #superfamily beta-thromboglobulin
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IFICATION #superfamily beta-thromboglobulin
#length 101 #molecular-weight 11292 #checksum
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Similarity 66.7%;
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                                                                                                         Lin, G.; Pearson, A.E.; Scamurra, R.W.; Zhou, Y.; M.J.; Weiss, D.J.; Murtaugh, M.P.
J. Biol. Chem. (1994) 269:77-85
Regulation of interleukin-8 expression in porcine macrophages by bacterial lipopolysaccharide.
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#common_name domestic sheep 
06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 
08-Sep-1997
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#superfamily beta-thromboglobulin
#length 101 #molecular-weight 11292 #checksum
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#formal_name Sus scrofa domestica #common_name domestic pig
02-Jun-1995 #sequence_revision 02-Jun-1995 #text_change
08-Sep-1997
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#cross-references MUID:95298037
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#accession A44253
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                                                                                                 ##cross-references EMBL:U22414; NID:g790632; PID:g790633
[FICATION #superfamily macrophage inflammatory protein #length 92 #molecular-weight 10335 #checksum
                                                                                                                                                ##molecule_type mRNA
##rocidues 1-92 ##label RES
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##residues 1-103 ##label GOO
##experimental_source alveolar macrophage
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Local Similarity 66.7%;
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71 QICADPKETWVQ 82
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#superfamily beta-thromboglobulin
#length 103 #molecular-weight 11677
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alveolar macrophage chemotactic factor-I (AMCF-I)
interleukin-8 homolog - pig
#formal_name Sus scrofa domestica #common_name domestic pig
30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change
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macrophage inflammatory protein-lalpha - rat
#formal_name Rattus norvegicus #common_name Norway rat
29-May-1998 #sequence_revision 29-May-1998 #text_change
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                                                                                                                                                                                                                                                     Shi, M.M.; Godleski, J.J.; Paulauskis, J.D. Biochem. Biophys. Res. Commun. (1995) 211:289-295 Molecular cloning and posttranscriptional regulation macrophage inflammatory protein-1 alpha in alveolar
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Pred. No. 5.41e-05;
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Pred. No. 3.31e-05;
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Best Local
                                                #journal #title
                                                                                                                                                                                                                                                          #authors Yoshimura, T.; Yuhki, N.

J. Immunol. (1991) 146:3483-3488

#title Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and their expression in spleen cells.

#cross-references_MUID:91225489
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##cross-references GB:Y10802; NID:g1924937; PID:e294088; PID:g1924938

##experimental_source bone marrow

This protein belongs to the beta-chemokine family which is one of
the major HIV-suppressive factors. It plays roles in autoimmune
processes such as multiple sclerosis and rheumatoid arthritis an
in tumor biology, and contribute to the trafficking and
recuitment of the responsive cells.
                                                                                                                            ##residues 1-101 ##label YOS
##cross-references GB:M57439; NID:g165552; pID:g165553
PICE S13052
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Similarity 58.3%;
Beaubien, B.C.; Collins, P.D.; Jose, P.J.; Totty, N.F.; Hsuan, J.; Waterfield, M.D.; Williams, T.J. Blochem. J. (1990) 271:797-801
A novel neutrophil chemoattractant generated during an inflammatory reaction in the rabbit peritoneal cavity vivo. Purification, partial amino acid sequence and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Van Coillie, E.; Froyen, G.; Nomiyama, H.; Miura, R.; I P.; Van Aelst, I.; Van Damme, J.; Opdenakker, G. Biochem. Biophys. Res. Commun. (1997) 231:726-730 Human monocyte chemotactic protein-2: cDNA cloning and regulated expression of mRNA in mesenchymal cells.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 neutrophil attractant/activation protein-1
#formal_name Oryctolagus cuniculus #common
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monocyte chemotactic protein-2 - human
#formal_name Homo sapiens #common_name man
02_May-1997_#sequence_revision 18-Jul-1997 #text_change
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Pred. No. 8.82e-05;
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#cross-references MUID:88234501
##molecular A30209
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#residues 1-148 ##label
##cross-references GB:J04467;
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A33497 #type complete
pre-B-cell growth-stimulating factor precursor - mouse
#formal_name Mus musculus #common_name house mouse
02-Jun-1994 #sequence_revision 02-Jun-1994 #text_change
10-Sep-1997
A53497; I59582
A53497
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A44771
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J. Biol. Chem. (1989) 264:679-682
Platelet-Gerived growth factor-inducible gene JE is a member of a family of small inducible genes related to platelet
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#journal Exp. Cell Res. (1994) 215:284-293

#title Molecular cloning of TPAR1, a gene whose expression is

repressed by the tumor promoter 12-0-tetradecanoylphorbol

13-acetate (TPA).

#cross-references MUID:95073497
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#title Signal sequence trap: a cloning strategy for proteins and type I membrane proteins.
#cross-references_MUID:93342488
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##molecule_type mRNA
##residues 1-89 ##label RES
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Similarity 66.7%;
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Proc. Natl. Acad. Sci. U.S.A. (1994) 91:2305-2309
Molecular cloning and structure of a pre-B-cell
growth-stimulating factor.
A53497
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#length 89
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interleukin-8 homolog - mouse
#formal_name Mus sp. #common_name mouse
02-Aug-1996_#sequence_revision 02-Aug-1996
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#formal_name Mus musculus #common_name house mouse 02-Aug-1996 #sequence_revision 02-Aug-1996 #text_c
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Pred. No. 3.76e-04;
2; Mismatches 2
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                                #cross-references MUID:91016858
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##molecule_type mRNA
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##cross-references GB:L12030; NID:g393181; PID:g393182
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Grove, M.; Lowe, S.; Graham, G.; Pragnell, I.; Plumb, M.
Nucleic Acids Res. (1990) 18:5561
Sequence of the murine haemopoletic stem cell
inhibitor/macrophage inflammatory protein 1-alpha gene.
                                                                                                                                                                                                                                          macrophage inflammatory protein-1-alpha precursor - mouse heparin-binding chemotaxis protein; L2G25B protein; SCI_MIP-la; SIS alpha; stem cell inhibitor/macrophage inflammatory protein 1-alpha; T-cell activation protein
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#formal_name Homo sapiens #common_name man
21-Dec-1996 #sequence_revision 06-Jun-1997
17-Jul-1998
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Science (1993) 261:600-603
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Honjo, T.
                                                                                                                                                            S11685
                                                                                                                                                                                         #formal_name Mus musculus #common_name house mouse
17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change
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.1685; A32393; S04533; A53885; A30552;
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Pred. No. 3.76e-04;
2; Mismatches 2
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Pred. No. 3.76e-04;
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                                                                                                                                                                                                                                                                                                                                            #journal J. Exp. Med. (1988) 168:2251-2259
#title Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta.

#cross-references MUID:89067830
#accession PS0303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  #accession AJUDD2
##molecule_type mRNA
##mocidues 1-21,'L',23-61,'A',63-92 ##label BRO
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#title A family of small inducible proteins secreted by leukocytes are members of a new superfamily that includes leukocyte and fibroblast-derived inflammatory agents, growth factors, and indicators of various activation processes.
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#contents
                                                   #authors Wolpe, S.D.; Davatelis, G.; Sherry, B.; Beutler, B.; Hesse, D.G.; Nguyen, H.T.; Moldawer, L.L.; Nathan, C.F.; Lowry, S.F.; Cerami, A.; S.F.; Cerami, A.; J. Exp. Med. (1988) 167:570-581
#title Macrophages secrete a novel heparin-binding protein with filammatory and neutrophil chemokinetic properties.
                                                                                                                                                                                                                                                                                                           ##molecule_type mRNA
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#title Cloning and characterization of a cDNA for murine macrophage inflammatory protein (MIP), a novel monokine with inflammatory and chemokinetic properties.

#cross-references MUID:88258380

#accession S04533
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#journal Proc. Natl. Acad. Sci. U.S.A. (1989) 86:1963-1967
#title cDNA sequence of two inducible T-cell genes.
#cross-references MUID:89184547
#accession A32393
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##residues 1-92 ##label DAV
##cross-references EMBL:X12531; NID:g53122; PID:g53123
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##note the authors translated the codon GAG for residue 49

Asp and ATT for residue 91 as Asn

##note the sequence has been corrected in reference A53885
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##note the authors' translation of the nucleotide sequence
differs at several positions from the sequence given
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##residues_ 1-48,'E',50-90,'I',92 ##label DA2
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Coit, D.; Cerami,
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Best Local S
Matches
                                                                                                                                                                                                                                     #authors Yoshimura, T.; Takeya, M.; Takahashi, K.
#journal Biochem. Biophys. Res. Commun. (1991) 174:504-509
#title Molecular cloning of rat monocyte chemoattractant protein-1
(MCP-1) and its expression in rat spleen cells and tumor
cell lines.
#cross-references MUID:91128376
#accession JN0128
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#title
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#accession S07723
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#accession I56104
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                                                                                                         ##residues 1-148 ##label YOS
##cross-references GB:M57441; NID:g205333; PID:g205334
##experimental_source spleen cells
the authors translated the codon GAA f
##note Lys and GCT for residue 63 as Leu
                                                                                                                                                                                                                                                                                                                                                                                          ##residues 1-148 ##label TIM
##cross-references EMBL:X17053; NID:g55530; PID:g55531
NCE JN0128
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T This protein is a monokine.
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Widmer, U.; Yang, Z.; van Deventer, Sherry, B.; Cerami, A.
                                         #superfamily macrophage inflammatory protein
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Analysis of the rat JE gene promoter identifies an AP-1 binding site essential for basal expression but not for TPA
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#formal_name Rattus norvegicus #common_name Norway rat
29-Jan-1993 #sequence_revision 29-Jan-1993 #text_change
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Pred. No. 1.57e-03;
4; Mismatches 1
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Best Local Similarity 66.7%;
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#title Molecular cloning of a human monocyte-derived neutrophil chemotactic factor (MDNCF) and the induction of MDNCF mRNA by interleukin 1 and tumor necrosis factor.
#cross-references_MUID:88258376
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#accession A32791
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**status preliminary ##molecule_type mRNA
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beta-thromboglobulin-like protein; fibroblast-derived
neutrophil-activating factor alpha; lung carcinoma-derived
chemotaxin; lymphocyte-derived neutrophil activating
factor; monocyte-derived neutrophil chemotactic factor;
monocyte-derived neutrophil-activating factor
#formal_name Homo sapiens #common_name man
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mukaida, N.; Shiroo, M.; Matsushima, K.
J. Immunol. (1989) 143:1366-1371
Genomic structure of the human monocyte-derived neutrophil chemotactic factor IL-8.
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                                                                                                                                                                                                                                                                      Regulation of the mRNA for monocyte-derived neutrophil-activating peptide in differentiating HL60
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Mol. Cell. Biol. (1989) 9:1946-1957
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Pred. No. 1.57e-03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #authors Schroeder, J.M.; Sticherling, M.; Henneicke, H.H.; Preissne
W.C.; Christophers, E.
#journal J. Immunol. (1990) 144:223-2232
#Li-lalpha or tumor necrosis factor-alpha stimulate release
three NAP-1/IL-8-related neutrophil chemotactic proteins
human dermal fibroblasts.
#cross-references MUID:90187866
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Appella, E.; Oppenheim, J.J.; Leonard, E.J.
#journal Proc. Natl. Acad. Sci. U.S.A. (1987) 84:9233-9237
Purification of a human monocyte-derived neutrophil chemotactic factor that has peptide sequence simil other host defense cytokines.
#cross-references MUID:88097462
#accession A39960
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#journal J. Exp. Med. (1989) 169:1895-1901

#title Purification and partial primary sequence of a chemotactic protein for polymorphonuclear leukocytes derived from human lung giant cell carcinoma LU65C cells.

#cross-references MUID:89279141

#accession PL0107
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Structure determination of a human lymphocyte derived
neutrophil activating peptide (LYNAP).
#cross-references MUID:88162914
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##residues 23-32 ##label SCH

##experimental_source dermal fibroblasts

##experimental_source dermal fibroblasts

##note a minor component of this material (15%) includes

##note a minor component of this material (15%) includes
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##residues 28-59 ##label WAL
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#residues 23-32,'XR',35,'X',37-52,'L',54 ##label
##experimental_source lung giant cell carcinoma LU6SC
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                 Nakagawa, H.; Hatakeyama, S.; Ikesue, A.; M. FEBS Lett. (1991) 282:412-414
Generation of interleukin-8 by plasmin from
                                                                                                                                                                                                                                            Opdenakker, G.; Billiau, A.
Eur. J. Immunol. (1989) 19:1189-1194
The chemotractic activity for granulocytes produced by virally infected fibroblasts is identical to monocyte-derived
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AVLPR-interleukin-8, the human fibroblast-derived
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##residues 21-67 ##label VA2
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                                                         K.; Mizumo, S.; Suzuki, K.
Immunol. Lett. (1990) 24:165-170
Coding region structure of interleukin-8 gene of human lung
giant cell carcinoma LU65C cells that produce
LUCT/interliukin-8: homogeneity in interleuki-8 genes.
                                                                                                                                                                                                                                                                                                                             Golds, E.E.; Mason, P.; NyIrkos, P.
Blochem. J. (1989) 259:585-588
Inflammatory cytokines induce synthesis and secretion protein and a neutrophil chemotactic factor but not beta-2--microglobulin in human synovial cells and
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A novel, NH-2-terminal sequence-characterized human monokine possessing neutrophil chemotactic, skin-reactive, and granulocytosis-promoting activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Car, B.D.; Baggiolini, M.; Walz, A. Biochem. J. (1991) 275:581-584 Formation of neutrophil-activating peptide 2 from platelet-derived connective-tissue-activating peptide by different tissue proteinases.
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Mol. Immunol. (1989) 26:87-93
Three forms of monocyte-derived neutrophil chemotactic (MDNCF) distinguished by different lengths of the amino-terminal sequence.
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Purification of granulocyte chemotactic peptide/interleukin-8 reveals N-terminal sequence heterogeneity similar to that of beta-thromboglobulin.
                                                                                                                                                                                Hotta, K.; Hayashi, K.; Ishikawa, J.; Tagawa, M.; Hashimoto,
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annotations omitted
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Query Match Best Local Similarity

75.3%; 58.3%;

Score 73; Pred. No.

DB 2; L 2.51e-03;

Length

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Best Local Similarity 58.3%;
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#title
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#journal J. Immunol. (1994) 152:1182-1189

#title Cloning, genomic organization, and chromosomal loc
of the Scya5 gene encoding the murine chemokine

#cross-references_MUID:94132613
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#title
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#accession A46539
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##molecule_type mRNA
##restidues 1-18,'A',20-91 ##label SCH
##experimental_source macrophage cell line PU5-1.8
##experimental_source extracted from NCBI backbone
##note NCBIP:106770)
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NCE A46539
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##cross-references GB:L04986;
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#formal_name Cavia porcellus #common_name guinea pig
02-Jul-196 #sequence_revision 02-Jul-1996 #text_change
23-Feb-1997
148148
                                                                                                                    Schall, T.J.; Simpson, N.J.; Mak, J.Y.
Eur. J. Immunol. (1992) 22:1477-1481
Molecular cloning and expression of the murine
cytokine: structural and functional conservat
mouse and man.
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J. Immunol. (1993) 151:6225-6236
CDNA cloning and expression of guinea attractant protein-1 (NAP-1): NAP-1
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Best Local Similarity 50.0%;
Matches 6; Conservative
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Martin, G.; Ladner, M.; Haskill, S.

#journal J. Immunol. (1990) 144:4434-4441

#title Monocyte adherence results in selective induction of novel genes sharing homology with mediators of inflammation and tissue repair.

tissue repair.

#cross-references_MUID:90257367
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#title Isolation and characterization of cDNA from renal tubular epithelium encoding murine Rantes: A small intercrine from the Scy superfamily.

#cross-references_MUID:92277990
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Shin, H.S.; Drysdale, B.E.; Shin, M.L.; Noble, P.W.; Fisher,

S.N.; Paznekas, W.A.

#journal Mol. Cell. Biol. (1994) 14:2914-2925

#title Definition of a lipopolysaccharide-responsive element in the

5'.flanking regions of MuRantes and crg-2.

#cross-references_MUID:94217689
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##residues 1-50 ##label SPO
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##residues
1-40,'E',42-91 ##label NEI
##residues
This chemoattractant for monocytes but not neutrophils
immediate-early response protein to LPS stimulation.
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#length 50 #checksum 9927
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#product monocyte chemoattractant cytokine RANTES
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QY 1 EICADPKQKWIQ 12

Search completed: Thu Apr 1 07:43:15 1999 Job time: 24 secs.

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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Thu Apr 1 07:41:37 1999; MasPar time 2.31 Seconds 139.459 Million cell updates/sec

Tabular output not generated.

Title:

Description: Perfect Score: Sequence: >US-08-927-939-13 (1-12) from US08927939.pep 97 1 EICADPKQKWIQ 12

Scoring table: PAM 150 Gap 15

Searched: 74019 seqs, 26840295 residues

Post-processing: Minimum Match 0% Listing first 100 summaries

Database: swiss-prot36 1:swissprot

Statistics: Mean 25.540; Variance 32.357; scale 0.789

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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                                   SEQUENCE
MEDLINE;
DECOCK B.
BIOCHEM.
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HOMO SAPLENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                                     SEQUENCE .

MEDLINE, 89184525.

ROBINSON E.A., YOSHIMURA T., LEONARD SHABANOMITZ J., HUNT D.F., APPELLA E. SHABANOMITZ J., HUNT D.F., APPELLA E. SHABANOMITZ J., ACAD. SCI. U.S.A. 86:185(
                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE; 91207938.
CHANG H.C., HSU F., FREEMAN G.J.,
INT. IMMUNOL. 1:388-399(1989).
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SHYY Y.J., LI Y.S.,
BIOCHEM. BIOPHYS. F
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MEDILINE; 89165862.
FURUTANI Y., NOMURA H., NOTAKE
LARSEN C.G., OPPENHEIM J.J., M.
BIOCHEM. BIOPHYS. RES. COMMUN.
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01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOTACTIC AND ACTIVATING FACTOR) (MCAF) (MONOCYTE SECRETORY PROTEIN JE)
(MONOCYTE CHEMOATTRACTANT PROTEIN 1) (HC11) (SMALL INDUCIBLE CYTOKINE)
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LI Y.S., SHYY Y.J.,
KOLATTUKUDY P.E.;
                                                                                                                                                                                        SEQUENCE OF 24-99.
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LEONARD E.J.;
   3D-STRUCTURE MODELLING
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                                   E OF 29-53 AND 8; 90211336.
B., CONINGS R.,
BIOPHYS. RES.
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BIOL. 9:4687
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RES. COMMUN. 169:346-351(1990)
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188
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                                                                                                                                                                                                                     ) E.J.;
305:47-56(1991).
                                                                                     82-92
                                   LENAERTS J.-P., BILIAU A., COMMUN. 167:904-909(1990).
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J.J., MATSUSHIMA K.;
COMMUN. 159:249-255(1989).
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RL36_HAEIN
DHML_PARDE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                     86:1850-1854(1989).
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SHIMA K.;
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                                                                                                                                                     E.J., TANAKA S.,
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                                                    DAMME
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     CC -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.

CC -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.

CC -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILATE RECEPTOR AND TARGET

CC CIT FROM AN ACTIVATOR OF BASIOPHIL CHEMORTERATIVE.

CC IT FROM AN ACTIVATOR OF DASOPHIL TO AN EOSINOPHIL CHEMORTERATIVE.

CC -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE

CC C-C) (CHEMOKINE CC).

DR EMBL; M31625; G386961; JOINED.

DR EMBL; M31625; G386961; JOINED.

DR EMBL; M2226; G380961; -.

DR EMBL; M22526; G380907; -.

DR EMBL; M22526; G380907; -.

DR EMBL; M28223; G380907; JOINED.

DR EMBL; M28223; G38007; JOINED.

DR EMBL; M28223; G38007; JOINED.

DR EMBL; M28224; G338007; JOINED.

DR EMBL; S9738; G545465; -.

DR EMBL; S9738; G545465; -.

DR EMBL; S9738; G545465; -.

DR EMBL; A17786; G641145; -.

DR EMBL; A35474; A35474.

PIR; S03339; S03339;
DR PDB; 1DOM; 11-MAR-97.

DR PDB; 1DOM; 11-MAR-97.

DR PDB; 1DOM; 14-OCT-96.

DR PDB; 1MCA, 15-OCT-94.
 MOD_RES
DISULFID
DISULFID
CARBOHYD
VARIANT
MUTAGEN
MUTAGEN
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MIM; 158105;
PROSITE; PSOC
CYTOKINE; CHE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE; 9623
HANDEL T.M.,
BIOCHEMISTRY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUBUNIT:

MEDLINE; 97053697.

KIM K.-S., RAJARATHNAM K., CLARK-LEWIS I., SYKES B.D.;

FEBS LETT. 395:277-282(1996).

1: FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND BASOPHILS

BUT NOT NEUTROPHILS OR EOSINOPHILS. AUGMENTS MONOCYTE ANTI-TUMOR

ACTIVITY: HAS BEEN IMPLICATED IN THE PATHOGENESIS OF DISEASES

CHARACTERIZED BY MONOCYTIC INFILTRATES, LIKE PSORIASIS, RHEUMATOID

ARTHRITIS OR ATHEROSCLEROSIS. MAY BE INVOLVED IN THE RECRUITMENT

OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE; 91312872.
GRONENBORN A.M., CLORE G.M.;
PROTEIN ENG. 4:263-269(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE; 94253189.
ZHANG Y.J., RUTLEDGE B.J., ROLLINS B.J.;
J. BIOL. CHEM. 269:15918-15924(1994).
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                                                                                                                   CHAIN
                                                                                                                                        SIGNAL
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LUBKOWSKI J., BUJI
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                                                                                                                                                      CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       UGUCCIONI M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NMR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DOMAILLE P.J.;
35:6569-6584(1996).
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                                                                                                                                                     SMALL_CYTOKINES_CC; 1.
XIS; SIGNAL; INFLAMMATORY RESPONSE; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2Z G., DOMAILLE P.J.,
4:64-69(1997).
   375
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376
376
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A -> T.
MISSING:
MISSING:
                                 POTENTIAL.
A -> T.
                                                                                                   MONOCYTE CHEMOTACTIC PROTEIN PYRROLIDONE CARBOXYLIC ACID.
 SSOT
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 ACTIVITY.
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RESULT 3
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Best Local
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                                                                                                                         DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
WONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOATTRACTANT PROTEIN-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MUTAGEN
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CHAIN
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                                                                                                                                                                                                                                                                                                                                             KUMAR A.G., BALLANTYNE C.M., MICHAEL L.H., LINDSEY M.L., HAWKINS H.K., BIRDSALL H.H., ROSSEN R.D., SMITH C.W., ENTMAN M.L., CIRCULATION 95:693-700(1997).
                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-JUGULAR VEIN ENDOTHELIAL; MEDLINE; 97176620.
                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                               EUKARYOTA; METAZOA;
EUTHERIA; CARNIVORA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CANIS FAMILIARIS (DOG)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SCYA2 OR MCP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MCP1_CANFA P52203;
                                                                                                                                                                                                             PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73
                                                            73 EICADPKQKWVQ 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                        \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                _
                                                                                                                                                                                                                                                                      FUNCTION: CHEMOTACTIC FÁCTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS. IMPORANT FACTOR IN THE COURSE OF THE INFLAMMATORY REACTION TO REPERFUSION OF THE PREVIOUSLY ISCHEMIC MYOCARDIUM. MAY PLAY A SIGNIFICANT ROLE IN MONOCYTE TRAFFICKING INTO THE REPERFUSED MYOCARDIUM.

SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY). INDUCTION: BY TNF-ALPHA.
                                                                                                                                                                                                                              TISSUE SPECIFICITY: ENDOTHELIUM OF SMALL VEINS AND INTRAFASCICULA: VEINS, AND INFILTRATING LEUKOCYTES.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EICADPKQKWIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EICADPKQKWVQ 84
                                        EICADPKQKWIQ 12
                                                                                 Similarity 91.7%, 11; Conservative
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11; Conse
                                                                                                                                                                                                                    (CHEMOKINE CC).
9653; G1144186; -.
                                                                                                                                                                                                            PS00472;
                                                                                                                                                                                                                                                                                                                                                                                                                                CARNIVORA.
                                                                                                                                                                                                 CHEMOTAXIS;
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larity 91.7%;
Conservative
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 STANDARD;
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                                                                                                                                                                                                          SMALL_CYTOKINES_CC; 1.
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101
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                                                                                          97.98;
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                                                                                                                                                                                                                                                                                                                                                                                                                                         CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
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91
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N->A: 50% REDUCTION IN ACTIVITY.
R->F: 95% REDUCTION IN ACTIVITY.
S->Q: 40% REDUCTION IN ACTIVITY.
Y->D: LOSS OF ACTIVITY.
R->L: 105% REDUCTION IN ACTIVITY.
D->L: 90% REDUCTION IN ACTIVITY.
                                                                                Score
Pred.
1; M
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                                                                                                                                                                          INFLAMMATORY RESPONSE.
BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN
                                                                                                                                  BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                        SIMILARITY)
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                                                                                                                                                                PYRROLIDONE CARBOXYLIC
PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                         A7075B14 CRC32;
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1. No. 1.15e-09;
Mismatches 0;
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. 1.15e-09;
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Best Local S
Matches 1
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01-NOV-1995 (REL.
01-NOV-1995 (REL.
15-JUL-1998 (REL.
             CAN BIDD HEPARIN.

-!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).

-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC).

C-C) (CHEMOKINE CC).

EMBL; 867954; E118856;

EMBL; 867956; G544997;

EMBL; 867956; G544997;

PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.

PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.

CYTOKINE; CHEMOTAXIS; SIGNAL; HEPARRN-BINDING; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 009141;
01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE
                                                                                                                                                                                                                      MEDLINE; 94114084.

WEMPE F., HANES J., SCHEIT K.H.;

DNA CELL BIOL. 13:1-8(1994).

-i- FUNCTION: CHEMOTACTIC FACTOR
                                                                                                                                                                                                                                                                                                                                        EUTHERIA; ARTIODACTYLA.
[1]
                                                                                                                                                                                                                                                                                                                                                                               BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHEMOATTRACTANT PROTEIN 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C-C) (CHEMOKINE CC).
EMBL; Z48479; G683717; -.
EMBL; X79416; G872313; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NEUTROPHILS.
-!- SUBUNIT: MONOMER OR
-!- SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BIOCHEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE; 94183284. HOSANG K., KNOKE I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SCYA2
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01.NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                              SCYA8 OR MCP2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-BRAIN;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     73 EICAEPKQKWVQ
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ARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PS00472; SMALL_CYTOKINES_CC;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MW;
                                                                                                                                                                                                                        FACTOR THAT ATTRACTS MONOCYTES. THIS PROTEIN
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Pred. No.
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BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
BY SIMILARITY MONOCYTE CHEM
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BY SIMILARITY.
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2.08e-09;
  CHEMOTACTIC PROTEIN
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                                                                                                                                                                                                                                                                                                                                                                                  TETRAPODA; MAMMALIA;
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MONOCYTES,
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Best Local
                                                                                                                                                                    DANTE M., GIBSON A.;

SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

-:- FUNCTION: CHEMOTACTIC FACTOR THAI ATTRACTS MONOCYTES, LYMPHOCYTES,

-:- FUNCTION: CHEMOTACTIC FACTOR THE ACCUMULATION OF BASOPHILS AND EOSINOPHILS, BUT NOT MEUTROPHILS. SIGNALS THROUGH CCR2B AND CCR3 RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF LEUKOCYTES AT BOTH SIDES OF ALLERGIC AND NONALLERGIC INFOLAMMATION.

MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF ARTHEROSCIEROSIS. MAY PLAY A ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO
                                                                                                                                                                                                                                                                                                                                     MEDLINE; 97341179.

MEDLINE; 97341179.

MEDLINE; 97341179.

BERKHOUT T.A., SARAU H.M., MOORES K., WHITE J.R., ELSHOURBAGY N., APPELBAUM E., REAPE T.J., BRAWNER M., MAKWANA J., FOLEY J.J., SCHMIDT D.B., IMBURGIA C., MACNULTY D., MATTHEWS J., O'DONNELL K., O'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPHEE C.;

J. BIOL. CHEM. 272:16404-16413(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE; 97113354. COMBADIERE C., GARCIA-ZEPEDA E.A., COMBADIERE C., LAVIGNE F., HAMID Q., MURPHY P.M., T. IMMUNOL. 157:5613-5626(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST SHOULTON UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 4 PRECURSOR (MCD-4) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           UGUCCIONI M., LOETSCHER P., FORSS
LI Y., KREIDER B., GAROTTA G., TH
J. EXP. MED. 183:2379-2384(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHEMOATTRACTANT PROTEIN 4) (CK-BETA10) (NCC-1). SCYA13 OR MCP4 OR NCC1.
                                   ++
                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE; 96235049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA; EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   099616;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MCP4_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-FETAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A., AND SEQUENCE OF 22-33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HOMO SAPIENS (HUMAN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         73 DVCADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ::||||||||:|
1 EICADPKQKWIQ 12
                                         MASS SPECTROMETRY: MW=9314; MW_ERR=30; METHOD=MALDI; MASS SPECTROMETRY: MW=8760; MW_ERR=30; METHOD=MALDI; MASS SPECTROMETRY: MW=8750; MW_ERR=30; METHOD=MALDI; INDUCTION: BY INTERLEUKIN-1 AND TNF-ALPHA.

THOUCTION: BY INTERLEUKIN-1 AND TNF-ALPHA.

THSSUE SPECIFICITY: WIDELY EXPRESSED. FOUND IN SMALL THYMUS, COLON, LUNG, TRACHEA, STOMACH AND LYMPH NODE. SEEN IN THE PULMONARY ARTERY SMOOTH MUSCLE CELLS.

THIS PROTEIN CAN BIND HEPARIN.
PTM: ONE MAJOR ISOFORM MCP-4, AND TWO MINOR (FNPOGLA)MCP-4 ARE PRODUCED BY DIFFERENTIAL (LA)MCP-4 IS ABOUT 30 FOLD LESS ACTIVE THAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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75
10900
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AND SEQUENCE OF 17-98.
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G., THELEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 92; DB 1; I
Pred. No. 6.73e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PYPROCLIDONE CARBOXYLIC ACID (BY SIMILARITY. BY SIMILARITY. BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ROTHENBERG M
LUSTER A.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ж .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEWALD B.,
BAGGIOLINI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 M.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
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ISOFORMS (LA)MCP-4 AND SIGNAL CLEAVAGE. MCP-4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SARAFI M.N.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Η.,
                                                                          INTESTINE,
                                                                                                                                       RANGE=17-98.
RANGE=22-98.
                                                                                                                       RANGE-24-98
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Best Local (
Query Match
Best Local Similarity
                                                                                                                        C-C) (CHEMOKINE CC).
EMBL; L132659; G624394; -.
EMBL; M44602; G163395; -.
PIR; A39296; A39296.
PIR; JC2336; JC2336.
                             DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                               P28291;
01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1A PRECURSOR (MCP-1A)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROSITE; I
                                                                                                                                                                                                                                                                                                                       TISSUE-SEMINAL PLASMA;
MEDLINE; 92096117.
                                                                                                                                                                                                                                                                                                                                                                     BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL
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                                                                MOD_RES
                                                                                                                                                                                                                                                       MEDLINE; 92181448.
WEMPE F., EINSPANIER R.,
                                                                                                                                                                                                                                                                                                                                                                                        SEMINAL FLUID PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                               MCPA_BOVIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MIM; 601391;
                                                                            CHAIN
                                                                                                                                                                      NEUTROPHILS.
-!- SIMILARITY: BELONGS TO
                                                                                                                                                                                                  WEMPE F., KUHLMANN J.K., SCHEIT K.H.;
BIOCHEM. BIOPHYS. RES. COMMUN. 202:1272-1279(1994)
                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE; 94338337.
                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                     SIGNAL
                                                                                              CYTOKINE;
                                                                                                                                                                                        -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT
                                                                                                                                                                                                                                               BIOCHEM.
                                                                                                                                                                                                                                                                           TISSUE=SEMINAL PLASMA;
                                                                                                                                                                                                                                                                                                                                                             EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
                                                                                                                  ISSP:
                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  72 EICADPKEKWVQ 83
|||||||:||:|
1 EICADPKQKWIQ 12
                                                                                                                P13500;
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                                                                                                       3500; 1MCA.
PS00472; S
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                                                                                                                                                                                                                                                                                                                                                             ARTIODACTYLA.
                                                                                             CHEMOTAXIS;
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                                                                                                                                                                                                                                                                                                    HENSCHEN A., SCHEIT K.
310L. 10:671-679(1991).
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24
24
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                             AA;
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XIS; SIGNAL; GLYO
                                                                                                     SMALL_CYTOKINES_CC;
                             59
75
11114
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 92.8%;
83.3%;
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29
29
29
                                                                                              SIGNAL
                                                                                                                                                                                                                                               ., SCHEIT K.H.;
COMMUN. 183:232-237(1992).
                                                                                                                                                                                                                                                                                                               SCHEIT K.H.;
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                             M.
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                                                                                                                                                                     THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
 Score
Pred.
                            BY SIMILARITY.
BY SIMILARITY.
C8F5821D CRC32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 91; DB 1; I
Pred. No. 1.21e-08
                                                        BY SIMILARITY.
MONOCYTE CHEMOTACTIC PI
PYRROLIDONE CARBOXYLIC
SIMILARITY).
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PYRROLIDONE CARBOXYLIC
BY SIMILARITY.
BY SIMILARITY.
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N
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DF52F6EC CRC32;
                                                                                                                                                                                                                                                                                                                                                                      VERTEBRATA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
 No ;
DB 1; I
2.16e-08;
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                             CRC32;
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                                                                                                                                                                                                                                                                                                                                                                      TETRAPODA;
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         Length
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                                                                            PROTEIN
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                                                                  ACID
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                                                                 (BY
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RESULT TO THE SOLUTION OF THE 
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Best Local
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DISULFID
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MCP1_RABIT
P28292;
01-DEC-1992
                                                                                                                                                                               EOTA_RAT STANDARD; PRT; 97 AA.

197545; OO8780;

15-JUL-1998 (REL. 36, CREATED)

15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)

15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)

EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).

RATTUS NORVEGICUS (RAT).

EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;

EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CARBOHYD
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 91225489.
YOSHIMURA T., YUHKI N.;
J. IMMUNOL. 146:3483-3488(1991).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
STRAIN-NEW ZEALAND WHITE;
                                                                                                          SEQUENCE FROM N.A. WILLIAMS C.M., NEWTON FLANAGAN B.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC). (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SCYA2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORYCTOLAGUS CUNICULUS (RABBIT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
 SUBMITTED
                                                       SEQUENCE FROM
                                                                                           SUBMITTED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PROSITE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EUTHERIA; LAGOMORPHA.
                                      ISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                          74 ICADPKQKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73
                                                                                                                                                                                                                                                                                                                                                                                                        N
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                                                                                                                                                                                                                                                                                                                                                                                                       ICADPKQKWIQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EICADPKQKWIQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           M57440; G165470; -. P13500; 1MCA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
10; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PS00472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHEMOTAXIS;
 (MAY-1997)
                                                                                           (DEC-1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         125 AA;
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35
40
55
112
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larity 90.9%;
Conservative
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24
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                                                                                                                                                                                                                                                                                                                                                                                                                                           84
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SMALL_CYTOKINES_CC; 1.
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75
40
55
112
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125
24
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                                                                                                                        .J.,
EMBL/GENBANK/DDBJ DATA BANKS
                                                                                       EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-SPLEEN
                                                                                                                          WILSON S.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 89; DB 1;
Pred. No. 3.85e-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PYRROLIDONE CARBOXYLIC SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BY SIMILARITY.

MONOCYTE CHEMOTACTIC PROTEIN 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFLAMMATORY RESPONSE; GLYCOPROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FBAC9D27 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
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                                                                                                                           COLEMAN J.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 125;
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EOTA_MOUSE P48298;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CARBOHYD
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFLAMMATORY RESPONSE.
SIGNAL 1 23
CHAIN 24 97
DISULFID 32 57
DISULFID 33 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DISULFID DISULFID
                                            C-C) (CHEMOKINE CC).

EMBL; U26426; G995911; -.

EMBL; U40672; G1113937; -.

MGD; MGI:103576; SCYA11.

PROSITE; PS00472; SMALL_CYTOKINES_CC;

EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
EDTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL;
                                                                                                                                                                     GUTIERREZ-RAMOS J.-C.;
IMMUNITY 4:1-14(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE; 96004658.
ROTHENBERG M.E., I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SCYALL.
MUS MUSCULUS (MOUSE).
MUSCULUS (MOUSE).
CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GONZALO J.-A., JIA G.-Q., AGUIRRE V., FRIEND D., COYLE A.J., JENKINS N.A., LIN G.-S., KATZ H., LICHTMAN A., COPELAND N.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 96158746.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-C57BL/6J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS
EOSINOPHIL;
                         NFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            71 EICADPKKKWVQ 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 EICADPKQKWIQ 12
                                                                                                                                                                                                                                                                           TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN THE EXPRESSION INDUCIBLE IN THE LUNG (TYPE I ALVEOLAR CELLS), INTESTINE, HEART, SPLEEN, KIDNEY.
                                                                                                                                                                                                                                                                                                                                              FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS (A PROMINENT FEATURE OF ALLERGIC INFLAMMATORY REACTIONS), BUT NOT LYMPHOCYTES, MACROPHAGES OR NEUTROPHILS.
SUBCELLULAR LOCATION: EXTRACELLULAR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PR
DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, A PROMIN
FEATURE OF ALLERGIC INFLAMMATORY REACTIONS (BY SIMILARITY).
SUBCELLULAR LOCATION: EXTRACELLULAR.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PTM: O-GLYCOSYLATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Y08358; E274141; -. U96637; G2098785; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NATL.
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10; Conser
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IL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RODENTIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAD.
  RESPONSE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LUSTER A.D.,
. SCI. U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10851 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (PROBABLE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 88; DB 1; 1
Pred. No. 6.85e-08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY.
BY SIMILARITY.
POTENTIAL.
L -> S (IN REF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       POTENTIAL.
EOTAXIN.
  POTENTIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LEDER P.;
92:8960-8964(1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05B4ED45 CRC32;
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                                                   GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          æ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROTEIN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 97;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                  THE THYMUS.
AR EPITHELIAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAMMALIA;
                                                                                                                                                                                                  (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROMINENT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KOPF M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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RESULTATION OF THE SULTATION OF THE SULT
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Rest Local S
Matches 1
CAN BIND HERARIN.

-!- SUBUNIT: MONOMER.
-!- PTM: O-GLYCOSYLATED.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BE
C-C) (CHEMOKINE CC).

EMBL; X72308; G313708; ALT_INIT.
EMBL; X72309; -; NOT_ANNOTATED_CDS.
EMBL; X71087; G288399; -.
EMBL; X71087; G288399; ALT_INIT.
EMBL; X71087; G288397; ALT_INIT.
                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 97053697.
KIM K.-S., RAJARATI
FEBS LETT. 395:277.
[6]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHAIN
DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MCP3_HUMAN STANDARD; PRT; 99 AA P80098; 01-DEC-1992 (REL. 24, CREATED) 01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE) 15-JUL-1998 (REMOTACTIC PROTEIN 3 PRECURSOR (MCPACTANT PROTEIN 3) (MC28).
                                                                                                                                                                                                              MEDILINE; 97263733.

MEDULIER S., BERNASSAU J.-M., GUILLEMOT J.-C., FERRARA P., BIOCHEMISTRY 36:44112-4422(1997).

-I- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES EOSINOPHILS, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE A ACTIVITY. ALSO INDUCES THE RELEASE OF GELATINASE B. T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.

MEDILINE; 93305913.

MINTY A., CHALON P., GUILLEMOT J.C.

MAGAZIN M., MILOUX B., MINTY C., RAI

SHIRE D., FERRARA P., CAPUT D.;

EUR. CYTOKINE NETW. 4:99-110(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE; 94375065.
OPDENAKKER G., FITEN P., N
LAUREYS G., VAN DAMME J.;
GENOMICS 21:403-408(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A., MEDLINE; 93213290. OPDENAKKER G., FROYI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-OSTEOSARCOMA;
MEDLINE; 92308855.
                                                                                                                                                                                                                                                                                                                               STRUCTURE BY NMR. MEDLINE; 97263733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE OF 30-99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BIOCHEM. BIOPHYS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRUCTURE BY NMR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HOMO SAPIENS (HUMAN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 71 EICADPKKKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DAMME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EICADPKQKWIQ
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10; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             J., PROOST P., LENA
ED. 176:59-65(1992).
                                                                                                                                                                                                                                                                                                                                                                                          RAJARATHNAM K., CL
395:277-282(1996).
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33
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83.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUBUNIT.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENAERTS J.-P.,
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                                                                                                                                                                                                                                                                                                                                                                                                              CLARK-LEWIS
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BY SIMILARITY.
BY SIMILARITY.
F85A96BC CRC32;
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Pred. No. 6.85e-08;
1; Mismatches
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191:535-542(1993)
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THIS PROTE
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RESULT AND SEED OF SEE
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Best Local S
Matches 1
SEÓUENCE FROM N.A.
TISSUE-PLACENTA;
MEDLINE; 97312708.
GARCIA-ZEPEDA E.A., ROTHENBERG M
MORTON C.C., LUSTER A.D.;
GENOMICS 41:471-476(1997).
[6]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EOTA_HUMAN STANDARD; PRT; 97 AA. P51671; P50877; Q92490; Q92491; 01-0CT-1996 (REL. 34, CREATED) 01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE) 01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE) EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTECTION OF THE 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOD_RES
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CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-SMALL INTESTINE;
MEDLINE; 96205964.
KITAURA M., NAKAJIMA T., II
TIFFANY H.L., MURPHY P.M.,
                                                                                                                                                                                                                                                                                                                         CHRISTOPHERS E.,
                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE; 96374440.
                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.,
TISSUE-FORESKIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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MACKAY C.R.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE;
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EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                J. BIOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFLAMMATORY RESPONSE;
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; S32222; S32222.
; A54678; A54678.
; INCV; 15-OCT-97.
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3; 96189937.
P.D., QIN S., RINGLER D.J., C
PTT X., GONZALO J.A., NEW!
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10; Conser
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                                                                                                                                                                                                                                                                                     BIOPHYS.
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larity 83.3%;
Conservative
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                                                                                                                                                                                                                                                                                                                      J.M.;
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                                                                                                            M.E.,
                                                                                                                                                                                                                                                                                     225:1045-1051(1996)
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No. 6.85e-08;
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                                                                                                            WEREMOWICZ
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                                                                                                            SARAFI M.N.,
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Best Local Similarity
Matches 9; Conser
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EMBL: U46573; G1280141; -.

EMBL: U34780; G1185440; -.

EMBL: D49372; G1552241; -.

EMBL: 26291; E221070; -.

EMBL: 275668; E251275; -.

EMBL: 275668; E251275; -.

EMBL: 275668; E251275; -.

EMBL: 275669; E251275; -.
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TISSUE~LUNG;
MEDLINE; 97445071.
HEIN H., SCHLUETER
                                                                                                                                                                                                                                                                                                                                                                                                                                    MCP2_PIG STANDARD; PRT; 99 AA. P49873; 01-0CT-1996 (REL. 34, CREATED) 01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE) MONOCYTE CHEMOATCRIC PROTEIN 2 PRECURSOR (MCP-CHEMOATTRACTANT PROTEIN 2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VARIANT
VARIANT
                                         CAN BIND HEPARIN.

-:- SUBUNIT: MONOMER OR HOMODINER; IN EQUILIBRIUM (BY SIMILARITY).

-:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-). (CHEMOKINE CC).

EMBL; 248480; G683719; -.

PROSITE; PS00472; SMALL CYTOKINES_CC; 1.

CYTOKINE; CHEMOTAXIS; SIGNAL; HEPARIN-BINDING; INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BIOCHEM. BIOPHYS. RES. COMMUN. 237:537-542(1997).
i- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS,
DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS,
FEATURE OF ALLERGIC INFLAMMATORY REACTIONS.
                                                                                                                                                                                                                         BIOCHEM. BIOPHYS. RES. COMMUN.
                                                                                                                                                                                                                                                HOSANG K.K., KNOKE I.I., SCHEIT K.K.;
                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE; 95091716.
                                                                                                                                                                                                                                                                                                                                                                                                                           SCYA8 OR MCP2
                                                                                                                                                                                                                                                                                                                                                                             SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MIM; 601156;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BARTELS J.;
                         SIGNAL
                                                                                                                                                                                                      -! - FUNCTION:
                                                                                                                                                                                                                                                                                                                                                             EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                71 DICADPKKKWVQ : | | | | | | | | | |
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUBCELLULAR LOCATION: EXTRACELLULAR.

PTM: O-GLYCOSYLATED (PROBABLE).

INDUCTION: BY TNF-ALPHA, IL-1-ALPHA AND INTERFERON GAMMA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PS00472; SMALL_CYTOKINES_CC;
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                                                                                                                                                                                                  CHEMOTACTIC
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75.0%;
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                                                                                                                                                                                                                                                                KLAUDINY J.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WW;
                                                                                                                                                                                                  FACTOR
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ECTAXIN.

BY SIMILARITY.

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L -> P (IN CLONE 3

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R -> R (IN CLONE 5
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Pred. No. 1.22e-07
  BY SIMILA MONOCYTE
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                    HEPARIN-BINDING;
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                               VERTEBRATA;
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                                                                                                                                                                                           205:148-153(1994).
OR THAT ATTRACTS MONOCYTES. THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRECURSOR (MCP-2) (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CHRISTOPHERS
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CHEMOTACTIC PROTEIN
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                                                                                                                                                                                                                                                                  WEMPE F.F.,
                                                                                                                                                                                                                                                                                                                                                                               TETRAPODA; MAMMALIA;
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                                                                                                                                                   MCP5_MOUSE STAN
Q62401;
01-NOV-1997 (REL. 3
01-NOV-1997 (REL. 3
15-JUL-1998 (REL. 3
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DISULFID
CARBOHYD
SEQUENCE
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DISULFID
SEQUENCE
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                                     SCYA12 OR MCP5.
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA;
EUTHERIA; RODENTIA.
                                                                                                                                01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 5 PRECURSOR (MCP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NEUTROPHILS.
-!- SUBUNIT: MONOMER OR
-!- SIMILARITY: BELONGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN-Z; TISSUE-S
MEDLINE; 93267104.
YOSHIMURA T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SCYA2 OR MCP1.
CAVIA PORCELLUS (GUINEA PIG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                  CHEMOKINE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             J. IMMUNOL. 150:5025-5032(1993).
-1- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,
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 SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                           71 EVCADPTQKWVQ
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1 EICADPKQKWIQ 12
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2; Misma
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Pred. No. 2.16e-07
2; Mismatches
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B7620BCF CRC32;
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BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROPYRROLIDONE CARBOXYLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               POTENTIAL.
                                                       VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERTEBRATA; TETRAPODA; MAMMALIA;
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RESULT
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAVIA PORCELLUS (GUINEA EUKARYOTA; METAZOA; CHOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-JUN-1994 (REL. 29, CREATED)
01-OCT-1996 (REL. 34, LAST SAN
15-JUL-1998 (REL. 36, LAST ANN
ECTAXIN PRECURSOR (EOSINOPHIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EOTA_CAVPO P80325;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CYTOKINE; CHEMOTAXIS; SIGNAL 1 2 CHAIN 23 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL; U50712; G1477582; -.
EMBL; U66670; G1881583; -.
MGD; MG1:108224; SCYA12.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE; 97149438.
SARAFI M.N., GARCIA-ZEPEDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JIA G.-Q., GONZALO J.A., LLOYD C., KREMER L., WERSHIL B.K., GUTIERREZ-RAMOS J.C.; J. EXP. MED. 184:1939-1951(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE; 9:
JIA G.-Q.,
                                                                                   STRAIN-HARTLEY; TI
MEDLINE; 94157409.
                                                                                                                                                                                             SEQUENCE FROM N.A.
MEDLINE; 95091818.
JOSE P.J., ADCOCK I.M., GRI
WELLS T.C., WILLIAMS T.J.,
                                                                                                                                                                                                                                                                                    [2]
                                                                                                                                                                                                                                                                                                         MEDLINE; 95173589.

ROTHENBERG M.E., LUSTER A.D., LI
J. EXP. MED. 181:1211-1216(1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LUSTER A.D.;
J. EXP. MED. 185:99-109(1997)
                           MOQBEL R.,
J. EXP. ME
                                                                                                                                                                           BIOCHEM. BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          +
                                                                                                                                                                                                                                                                                                                                                                                                                                         EUTHERIA;
                                                                                                                                  SEQUENCE OF 24-96
                                                                                                                                                                                                                                                                                                                                                                            ISSUE=LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
nes 9; Conse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  72 EICADPKEKWV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS EOSINOPHILS, MONOCYT AND LYMPHCCYTES BUT NOT NEUTROPHILS, POTENT MONOCYTE ACTIVE CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC CHEMOKINE THAT SIGNALS THROUGH CCR2. INVOLVED IN ALLERGIC INFLAMMATION AND THE HOST RESPONSE TO PATHOGENS AND MAY PLAY A PIVOTAL ROLE DURING EARLY STACES OF ALLERGIC LUNG INFLAMMATION. SUBUNIT: HOMODIMER (BY SIMILARITY).

TISSUE SPECIFICITY: PREDOMINANTLY EXPRESSED IN THE LYMPH NODES ITHYMUS. ALSO FOUND IN THE SALIVARY GLANDS CONTAINING LYMPH NODE: BREAST, LUNG, BRAIN, SMALL INTESTINE, KIDNEY AND COLON.

INDUCTION: BY IFN-GAMMA AND LIPOPOLYSACCHARIDE (LPS).

SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKI)
P.J., GRIFFITHS-JOHNSON D.A., COLLINS
BEL R., TOTTY N.F., TRUONG O., HSUAN J.
XXP. MED. 179:881-887(1994).
FUNCTION: IN RESPONSE TO THE PRESENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FICADPKQKWI
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                                                                                                                                                                                                                                                                                                                                                                                                                                         RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                104 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD;
                                                                                                            TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      34, LAST SEQUENCE UPDATE)
36, LAST ANNOTATION UPDATE)
(EOSINOPHIL CHEMOTACTIC PRO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           CHORDATA;
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                                                                                                                                                                        COMMUN.
                                                                                                                                                                      GRIFFITHS-JOHNSON D.A.,
J., POWER C.A.;
COMMUN. 205:788-794(1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MW;
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Pred.
2; N
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MONOCYTE CHEMOTACTIC PROTEIN 5.
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                             LILLY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 No.
                                          HSUAN J.J., WILLIAMS
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. 6.72e-07;
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  ALLERGENS,
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                                                                                                                                                                                                                     BERKMAN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SMALL CYTOKINE
                                          D.T.,
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  PROTEIN
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Best Local S
Matches
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SIGNAL 1 23
CHAIN 24 96
DISULFID 31 56
DISULFID 32 72
CARBOHYD 93 93
CONFLICT 88 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DISULFID
DISULFID
CARBOHYD
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LT 16
IL8_CANFA
P41324;
                                                                                                                                           MEDLINE; 95114148.

KUKIELKA G.L., SMITH W.C., LAROSA G.J., MANNING A.M.,

MENDOZA L.H., DALY T.J., HUGHES B.J., YOUKER K.A., HAWKINS H.K.,

MENDOZA L.H., DALY T.J., HUGHES B.J., YOUKER K.A., HAWKINS H.K.,

MICHAEL L.H., ROT A., ENTMAN M.L.;

J. CLIN. INVEST. 95.89-103(1994).

J. CLIN. INVEST. 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- SIMILARITY: BELONGS TO THE INTERCRINE C-C) (CHEMOKINE CC).

EMBL; U18941; G687656; -.

EMBL; X77603; G602552; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-FEB-1995 (REL.
01-FEB-1995 (REL.
01-NOV-1995 (REL.
                 C-X-C) (CHEMOKINE CXC).
EMBL; D28772; G517100; -.
EMBL; D14285; G475152; -.
EMBL; U10308; G607814; -.
                                                                                          RESPONSE TO AN INFLAMMATORY
-!- SUBUNIT: HOMODIMER.
-!- SIMILARITY: BELONGS TO THE :
                                                                                                                                                                                                                                                                                                                                                    GOITSUKA R., TSUJIMOTO H. ISHIKAWA J., HOTTA K., SU CYTOKINE 6:455-461(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CANIS FAMILIARIS (DOG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                          MATSUMOTO Y., MOHAMED A.,
                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. TISSUE-LYMPH NODE; MEDLINE; 95127913.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EUTHERIA; CARNIVORA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HSSP; P13500;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INTERLEUKIN-8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PROSITE;
                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SHIKAWA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          71 ICADPKKKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PTM: O-GLYCOSYLATED (PROBABLE)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KAWA J., SUZUKI S.,
131:305-306(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ICADPKQKWIQ
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9; Conser
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CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                               TISSUE-JUGULAR VEIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31, CREATED)
31, LAST SEQUENCE UPDATE)
32, LAST ANNOTATION UPDATE
SMALL_CYTOKINES_CXC;
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                                                                                                                                                                                                                                                                                                                                                                      H., HASEGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HOTTA K.,
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                                                                                                                                                                                                                                                                                                                                                                                         ONODERA T., KI, HASEGAWA A.,
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Pred.
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BY SIMILARITY.
BY SIMILARITY.
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D -> G (IN REF.
DD28C7E5 CRC32;
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                                                                                           INTERCRINE ALPHA
                                                                                                                                STIMULUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                No.
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GLYCOPROTEIN;
                                                                                                                                                                                                                                                                                                                                                                          HIROTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HIROTA Y.,
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2.07e-06;
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                                                                                           FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIGNAL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SUZUKI
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P36925;
01-JUN-1994 (REL. 2
01-JUN-1994 (REL. 2
01-NOV-1995 (REL. 2
INTERLEUKIN-8 PRECU
        IL8_PIG STANDARD; PRT; 103 AA. P25894; P22951; Ol-AUG-1991 (REL. 19, CREATED) Ol-AUG-1992 (REL. 23, LAST SEQUENCE UPDATE) Ol-OCT-1996 (REL. 34, LAST ANNOTATION UPDATI INTERLEUKIN-8 PRECURSOR (IL-8) (ALVEOLAR MACHINE PRECURSOR (IL-8) 
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MEDLINE; 95137691.

SEROW H.F., YOSHIMURA T., WOOD P.R., COLDITZ I.G.;

IMMUNOL. CELL BIOL. 72:398-405(1994).

IF FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,

BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN

NEUTROPHIL ACTIVACTION. IT IS RELEASED FROM SEVERAL CELL TYPES IN

RESPONSE TO AN INFLAMMATORY STIMULUS.

-!- SUBUNIT: HOMODIMER.

-!- SUBUNIT: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE)
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SIGNAL
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PIR; $42496; $42496.
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GENE 150:367-369(1994).
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(AMCF-I).
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1 EICADPKQKWIQ
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8; Conservative
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METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
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XIS; INFLAMMATORY RESPONSE;
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BY SIMILARITY.
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29, LAST SEQUENCE UPDATE)
32, LAST ANNOTATION UPDATE)
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2 BY SIMILARITY.
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                       (ALVEOLAR MACROPHAGE CHEMOTACTIC
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No. 2.07e-06;
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2.07e-06;
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-!- SUBUNIT: HOMODIMER.
-!- TISSUE SPECIFICITY: ALVEOLAR MACROPHAGES.
-!- INDUCTION: BY LIPOPOLYSACCHARIDE.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA CX-C) (CHEMOKINE CXC).
EMBL; M86923; G164521; --
EMBL; M61151; G516197; --
EMBL; M9367; G1235612; --
EMBL; M9367; G1235612; --
EMBL; M93619; A39819; A39819
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SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHOR
EUTHERIA; ARTIODACTYLA.
[1]
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DISULFID
CONFLICT
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MIA_RAT
STANDARD; PRT; 92 AA
P50229;
01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRESCYA3 OR MIP1A.
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J. BIOL. CHEM. 266:8455-8463 (1991).
-i- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. I
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM S
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MEDLINE; 91217086
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MEDLINE; 94103307.
LIN G., PEARSON A.E.,
WEISS D.J., MURTAUGH 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                          SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFLAMMATORY RESPONSE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL/GENBANK/DDBJ DATA
                                                                                                                                                                                                                                                                                                                                  ¥.
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                                                                                                                                                                                                                                                          Score
Pred.
3; M
                                                                                                                                                                                                                                                                                                                                             INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
RC -> CR (IN REF
                                                                                                                                                                                                                                                                                                                              RC -> CR (IN REF. 2
K -> KK (IN REF. 2
A012D59D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INTERCRINE ALPHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R. W.
                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                           82;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-45
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                                                                                                                                                                                                                                                                          DB 1; L
2.07e-06;
                UPDATE)
HA PRECURSOR (MIP-1-ALPHA).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHI E.Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DATA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL.
                                                                                                                                                                                                                                                                                                                                               2).
                                                                                                                                                                                                                                                          ;;
                                                                                                                                                                                                                                                                                           Length 103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BAARSCH M.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  T ATTRACTS NEUTROPHILS,
IT IS ALSO INVOLVED IN
SEVERAL CELL TYPES IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BANKS
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                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MARTIN T.R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KUIJPER J.L.,
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RESULT RESULT ACCORD RESULT RE
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Best Local
                  MEDLINE: 95034774.

PROOST P., WUYTS A., LENAERTS J.-P., VAN DAMME J.;
BIOCHEMISTRY 33:13406-13412(1994).

-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. ALSO INDUCES THE RELEASE OF GELATINASE B. THIS PROTEIN CAN BIND HEPARIN.
                                                                                                                                                                                                                                                                        P80343;
01-FEB-1995 (REL. 31, CREATED)
01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDAT
MONOCYTE CHEMOTACTIC PROTEIN 1B (MCP-1B) (F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAKAGAWA ... SHIOTA S., TAKANO K., SHIBATA F., KATO H.;
BIOCHEM. BIOPHYS. RES. COMMUN. 220:945-948(1996),
11- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPER
HAS CHEMOTACTIC ACTIVITY FOR MONOCYTES, NEUTOPHILS, EOSINOP
HAS OPHILS, AND LYMPHOCYTES. REQUIRED FOR LUNG TNF-ALPHA
PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJUR
MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE
PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR
ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFLUX. THIS PROT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN-CD-1; TISSUE-LUNG;
MEDLINE; 95298037.
SHI M.M., GODLESKI J.J., PAULAUSKIS J.D.;
BIOCHEM. BIOPHYS. RES. COMMUN. 211:289-295(1995)
                                                                                                                                                                                                                                                                 SOB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE; PS00472; SMALL_CYTOKINES_CC; CYTOKINE; CHEMOTAXIS; INFLAMMATORY RE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 9523
SHANLEY T.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RATTUS NORVEGICUS () EUKARYOTA; METAZOA;
                                                                                                                                                       TISSUE-KIDNEY;
                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; U22414; G790633; -. EMBL; U06435; G459150; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 24-57.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                      EUTHERIA;
                                                                                                                                                                                                                                             EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                             MCPB_BOVIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
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                                                                                                                                                                                                                                 TAURUS (BOVINE).
ARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INDUCTION: BY LIPOPOLYSACCHARIDE (LPS). SIMILARITY: BELONGS TO THE INTERCRINE BETA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BINDS HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EICADPKQKWIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
8; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (CHEMOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95238980.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    83.5%;
larity 66.7%;
Conservative
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35
57
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                                                                                                                                                                                                                                                                                                                                                                                               STANDARD;
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Pred.
3; M
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BY SIMILARITY.
A -> T (IN REF.
C -> W (IN REF.
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                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        H.P.,
                                                                                                                                                                                                                                                                                   (MCP-1B) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N 81;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESPONSE; SIGNAL; HEPARIN-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; DB 1; I
. 3.63e-06;
                                                                                                                                                                                                                                                                                                       UPDATE)
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                                                                                                                                                                                                                                                                                                                                                                                             74 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          M.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2).
2 AND
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WARD
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Best Local
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 EMBL;
                                                                                                                                                                                                                                                                                                                                       SEQUENCE MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P80075; p78388;
01-DEC-1992 (REL. 24, CREATED)
01-DEC-1992 (REL. 35, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
CHEMOATTRACTANT PROTEIN 2 PRECURSOR (MCP-2)
CHEMOATTRACTANT PROTEIN 2) (HC14).
SCYAB OR SCYALO OR MCP2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).

PROSITE: PS00472; SMALL_CYTOKINES_CC; 1.
                      SPLEEN AND PROSTATE.
-!- INDUCTION: BY INTERFERON
-!- SIMILARITY: BELONGS TO TH
C-C) (CHEMOXINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                      VAN COILLIE E., FROYEN E
VAN AELST I., VAN DAMME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VAN COILLIE E., FITEN P., NO. VAN DAMME J., OPDENAKKER G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HOMO SAPIENS (HUMAN)
EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MCP2_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DISULFID
                                                                                                                                                                       FEBS LETT. 395:277-282(1996).
                                                                                                                                                                                                  SUBUNIT.
MEDLINE; 97053697
                                                                                                                                                                                                                                      MEDLINE; 92308855.
VAN DAMME J., PROOST P., LEN
J. EXP. MED. 176:59-65(1992)
                                                                                                                                                                                                                                                                          TISSUE=OSTEOSARCOMA;
                                                                                                                                                                                                                                                                                                                            CHANG H.C., HSU F.,
                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A., TISSUE-BONE MARROW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENOMICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NON_TER
                                                                                                                                                                                                                                                                                          SEQUENCE OF 26-99
                                                                                                                                                                                                                                                                                                                INT. IMMUNOL.
                                                                                                                                                                                                                                                                                                                                                                             BIOCHEM. BIOPHYS. RES. COMMUN.
                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE; 97224420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 97237052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A., AND VARIANT GLN-69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         48 EICAEPKXXWVQ 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 EICADPKQKWIQ 12
                                                                                                            SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.
TISSUE SPECIFICITY: HIGHEST EXPRESSION FOUND IN THE SMALL
                                                                                                                                    FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPH BASOPHILS AND EOSINOPHILS. MAY PLAY A ROLE IN NEOPLASIA AND INFLAMMATORY HOST RESPONSES. THIS PROTEIN CAN BIND HEPARIN.
                                                                       INTESTINE AND PERIPHERAL BLOOD CELLS. INTERMEDIATE LEVELS SEEN THE HEART, PLACENTA, LUNG, SKELETAL MUSCLE, THYMUS, COLON, OVAF SPINAL CORD AND PANCREAS. LOW LEVELS SEEN IN THE BRAIN, LIVER,
 X99886; E279930; ALT_INIT
Y10802; E294088; -.
                                                                                                                                                                                                                                                                                                                                      91207938.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40:323-331(1997).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10
74 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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                                                                                                                                                                                                                                                                                                                1:388-399(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                         FROYEN F., NOMIYAMA H.,
AN DAMME J., OPDENAKKER
                                                                                                                                                                                                                                                                                                                                                   FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8360 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              82.5%;
                                                                                                                                                                                                                                                                                                                            FREEMAN G.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                        AND VARIANT
                                                                                                                                                                                                                                                   LENAERTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NOMIYAMA H.,
                                     THE INTERCRINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BY SIMILARITY.
BY SIMILARITY.
66172F08 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 80; DB 1; I
Pred. No. 6.33e-06;
                                                  GAMMA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2
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                                                                                                                                                                                                                                                                                                                                                                             231:726-730(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                          GLN-69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                  J.-P.,
                                                                                                                                                                                                                                                                                                                            GRIFFIN J.D., REINHERZ E.L.;
                                                                                                                                                                                                                                                                                                                                                                                                   н.,
                                                  MITOGENS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SAKAKI Y.,
                                                                                                                                                                                                                                                                                                                                                                                                    MIURA R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Å
                                                                                                                                                                                                                                                   OPDENAKKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TETRAPODA; MAMMALIA;
                                     BETA
                                                 AND
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                                     FAMILY
                                                  INTERLEUKIN-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MIURA R.,
                                                                                                                                                                                                                                                                                                                                                                                                      FITEN
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                                                                                                                                                                                                                                                   G.;
                                     (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                      .
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                                                                                                                                                               LYMPHOCYTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          YOSHIE O.,
                                                                                      OVARY,
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                       CYTOKINE;
SIGNAL
CHAIN
DISULFID
DISULFID
                                                                                                          WEDLINE: 97275308.

WELLS T.N.C., PEITSCH M.C.;

J. LEUKOC. BIOL. 61:545-550(1997).

-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS LY
MONOCYTES OR GRANULOCYTES, MAY BE INVOLVED IN
INTO B CELL FOLLICLES IN LYMPH NOBES.

-i- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS
LEVEL EXPRESSION IS SEEN IN LYMPHOID TISSUES
                                                                                                                                                                                                                                          SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
TISSUE-AORTA, AND LUNG;
MEDLINE; 97376836.
HIESHIMA K., IMAI T., BABA M., SHOUDAI K., ISHIZUKA K.,
NAKAGAWA T., TSURUTA J., TAKEYA M., SAKAKI Y., TAKATSUKI K.,
MIURA R., OPDENAKKER G., VAN DAMME J., YOSHIE O., NOMIYAMA I.
J. IMMUNOL. 159:1140-1149(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
DISULFID
VARIANT
                                                                                                                                                                                                        SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
MUELLER C.,
MUELLER C.,
MUELLER C.,
MUELLER C.,
                                                                                                                                                                                                                                                                                                                                                            HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHAIN
MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HSSP; P13500; 1MCA.
MIM; 602283; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC;
CYTOKINE; CHEMOTAXIS; SIGNAL; HEPARIN-
                                                                         THYMUS AND APPENDIX.

-i- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).

-i- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                          PATENT
                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
LI H., RUBEN S.;
                                                        EMBL; AB000221;
EMBL; Y13710; E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIGNAL
                                                PROSITE;
                                                                                                                                                                                        DISCUSSION OF SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   POLYMORPHISM.
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                                                                                                                                                                                                                                                                                                                          NUMBER US5504003
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                                              3710; E321838; -
PS00472; SMALL_C
                                     CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHEMOTAXIS;
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                                     SMALL_CYTOKINES_CC;
XIS; INFLAMMATORY RE:
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58.3%;
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                                                                                                                                                                                                          POLITZ O., HAKIY N., OI EMBL/GENBANK/DDBJ DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred.
5; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 80; DB 1; I
Pred. No. 6.33e-06;
MACROPHAGE INFLAMMATORY PROTEIN 4. BY SIMILARITY. BY SIMILARITY.
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MONOCYTE CHEMOTACTIC PROPYRROLIDONE CARBOXYLIC
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                                                                                                                                                                                                                                                                                                                                                                       VERTEBRATA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HEPARIN-BINDING;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                     RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A
                                                                                                                                                                                                                                                                                                                                                                        TETRAPODA; MAMMALIA;
                                                                                                                                                                                                         ORFANOS TA BANKS.
                                     SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
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                                                                                                                                         LYMPHOCYTES BUT
IN B CELL MIGRAT
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                                                                                                             IN THE LUNG. I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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Best Local
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Best Local
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P19874;
01-FEB-1991
01-DEC-1992
01-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IL8_BOVIN
P79255;
01-NOV-1997
01-NOV-1997
01-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHAIN
DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; S8:
PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAMPOS M., BABIUK L.A.;

MICROB. PATHOG. 20:203-212(1996).

-!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,

-!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,

BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN

NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN

RESPONSE TO AN INPLANATORY STIMULUS (BY SIMILARITY).

-!- SUBUNIT: HOMODIMER (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                          ORYCTOLAGUS CUNICULUS (RABBIT).
EUKARYOTA; METAZOA; CHORDATA; V
EUTHERIA; LAGOMORPHA.
                                                                                                                                                                                                                                    01-FEB-1991 (REL. 17, CREATED)
01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8) (NEUTROPHIL ATTRACT
PROTEIN-1) (NAP-1) (PERMEABILITY FACTOR 1) (RPF1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQU)
01-NOV-1997 (REL. 35, LAST ANNO:
01-NOV-1997 (REL. 35, LAST ANNO:
                                                      MEDLINE; 91225489.
YOSHIMURA T., YUHK
                                                                                               SEQUENCE FROM N.A.
STRAIN-NEW ZEALAND WHITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CYTOKINE; CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MORSEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. MEDLINE; 96304552.
SEQUENCE OF 23-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity 58.3% 7; Conservative
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                                   ., YUHKI N.;
146:3483-3488(1991).
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35, LAST SEQUENCE UPDATE)
35, LAST ANNOTATION UPDATE)
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                                                                                                   TISSUE-SPLEEN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 79;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 79;
Pred. No.
3; Misma
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BY SIMILARITY.
v; 0E39C526 CRC3
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                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                             VERTEBRATA;
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1.10e-05;
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                                                                                                                                                                               TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                             ATTRACTANT/ACTIVATION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 101;
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ROLLINS B.J
                                    EMBL; J04467; G387169; -. EMBL; M19681; G387168; -. PIR: A30209; A30209. PIR: A30861; 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN-NEW ZEALAND WHITE; TISSUE-PERITONEAL CAVITY;

MEDLINE; 91058518.

BEAUBIEN B.C., COLLINS P.D., JOSE P.J., TOTTY N.F., HSUAN J.,

WATERFIELD M.D., WILLIAMS T.J.;

BIOCHEM. J. 271:797-801(1990).

-i-FUNCTION: II-8 IS A. CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,

BIOCHEM. J. 171-8 IS A. CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,

-i-FUNCTION: II-8 IS A. CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,

NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN

RESPONSE TO AN INFLAMMATORY STIMULUS.

-i-SUBUNIT: HOMODIMER.

-i-SUBUNIT: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE

-1-SUBUNIT: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MCP1_MOUSE STANDARD; PRT; 148 AA.

P10148;
01-MAR-1989 (REL. 10, CREATED)
01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (PLATELET-DERIVED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VAN DAMME J., DECOCK B., BERTINI R., C
PUT W., OPDENAKKER G., MANTOVANI A.;
EUR. J. BIOCHEM. 199:223-229(1991).
-!- FUNCTION: CHEMOTACTIC FACTOR THAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE OF 26-42.
MEDLINE: 91293127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GROWTH FACTOR-INDUCIBLE PROTEIN JE). SCYA2 OR MCP1 OR JE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                         -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MUS MUSCULUS (MOUSE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KAWAHARA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BIOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            _
                                                                                                                                                                                                                                                           SIMILARITY: BELONGS TO C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                  SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM INDUCTION: BY PLATELET-DERIVED GROWTH FACTOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                              NEUTROPHILS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25
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EICADPKQKWIQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NATL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FROM N.A.
89093129.
R.S., DEUEL T.F.;
CHEM. 264:679-682(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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CAD. SCI. U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                              THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
K -> I (IN REF. 2).
CB32CC30 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 79; DB 1;
Pred. No. 1.10e-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STILES C.D.;
. 85:3738-3742(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ψ
                                                                                                                                                                                                                                                                                                              INTERCRINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CONINGS R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                         BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENAERTS J.-P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                (BY
                                                                                                                                                                                                                                                                                                                                                                                                SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BUT
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Best Local Similarity
Matches 8; Consei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SDF1_MOUSE
P40224;
01-FEB-1995
01-FEB-1995
01-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DISULFID
DISULFID
CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-FEB-1995 (REL. 31, CREATED)
01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
STROMAL CELL-DERIVED FACTOR 1 PRECURSOR (SDF-1) (PRE-B CELL GROWTH
STIMULATING FACTOR) (PBSF) (12-O-TETRADECANOYLPHORBOL 13-ACCETATE
REPRESSED PROTEIN 1) (TPAR1) (THYMIC LYMPHOMA CELL STIMULATING FACTOR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL
                                          EMBL;
EMBL;
EMBL;
EMBL;
EMBL;
                                                                                                                                                                                                                                                                                                                                             NOMURA M., NAKATA Y., UZAWA A., NOSE M., AKASHI M., SUZUKI G.; SUBMITTED (DEC-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-I- EUNCTION: CHEMOATTRACTANT ACTIVE ON T-LYMPHOCYTES, MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
MEDLINE; 95073497.
JIANG W., ZHOU P., KAHN S.M.,
WEINSTEIN I.B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. MEDLINE; 93342488. TASHIRO K., TADA H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE; 94181581.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                            STROMAL CELL-DEPENDENT B-CELL CLONE DW34 CELLS.
-!- ALTERNATIVE PRODUCTS: TWO DIFFERENT FORMS (ALPHA AND BETA)
-PROBABLY GENERATED BY ALTERNATIVE SPLICING.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL (
                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MGD; MGI:98259; SCYA2.
PROSITE; PS00472; SMAI
                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN-AKR/J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EXP. CELL RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SCIENCE 261:600-603(1993).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (TLSF).
                    C-X-C) (CHEMOKINE CXC).

BBL; D1772; G468457; .

BBL; L12029; G393180; -

BBL; L12030; G393182; .

BBL; S74318; G786394; -

BBL; D43804; G1304174; -

BBL; D43805; G1304175; -

BBL; D43805; G1304175; -

BBL; A53497; A53497.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  73 EVCADPKKEWVQ
                                                                                                                                                                                                                                                                        NOT NEUTROPHILS.

FUNCTION: STIMULATES THE PROLIFERATION OF BONE MARROW-DERIVED PROGENITOR CELLS IN THE PRESENCE OF IL-7 AS WELL AS GROWTH OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EICADPKQKWIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AWA T., KIKUTANI
NATL. ACAD. SCI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CHEMOTAXIS; S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RODENTIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             34
35
126
148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KIKUTANI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             215:284-293(1994).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SMALL_CYTOKINES_CC; 1.

XIS; SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN.

BY SIMILARITY.

148 MONOCYTE CHEMOTACTIC PROTEIN 1.

PYRROLIDONE CARBOXYLIC ACID (BY
SIMILARITY).

59 BY SIMILARITY.

59 BY SIMILARITY.

126 POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HEILKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . #.;
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S
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S.A. 91:2305-2309(1994).
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Pred. No. 1.
2; Mismatc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOMITA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B7572BBC CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SHIROZU
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Z.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAKANO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          M.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Τ.,
                                                                                                                                                                                              (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HONJO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
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P48061;
01-FEB-1996
01-FEB-1996
15-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CYTOKINE;
SIGNAL
CHAIN
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DISULFID
VARSPLIC
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
STROMAL CELL-DERIVED FACTOR 1 PRECURSOR (SDF-1) (PRE-B
STIMULATING FACTOR) (PBSF).
                                                                                                                                              DISULFID DISULFID
                                                                                                                                                                                                                                                                                      -!- ALTERNATIVE PRODUCTS: TWO DIFFERENT FORMS
PROBABLY GENERATED BY ALTERNATIVE SPLICING
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPH
C-X-C) (CHEMOKINE CXC).
EMBL; U16752; G571508; -.
EMBL; L36033; G1220366; -.
PDB; 13DF; 28-JAN-98.
PDB; 23DF; 17-JUN-98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CRUMP M.P., GONG J.H., ARENZANA-SEISDEDOS F., CLARK-LEWIS I.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; C
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE; 96039262.
SHIROZU M., NAKANO T., INAZAWA
SHIROHARA T., HONJO T.;
GENOMICS 28:495-500(1995).
                                                                                                                                                                                                   SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBO J. 16:6996-7007(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUBMITTED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SPOTILA L.D
                                                                                                                                                                                    CHAIN
                                                                                                                                                                                                                                 PROSITE; PS00471; SMALL_CYTOKINES_CXC; FALSE_NEG.
CYTOKINE; CHEMOTAXIS; GROWTH FACTOR; SIGNAL; ALTERNATIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRUCTURE BY NMR OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE; 96039262.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE;
                                                                                                                                                                                                                        D-STRUCTURE.
                    69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    69 QVCIDPKLKWIQ 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                           FUNCTION: CHEMOATTRACTANT
                                                                                                                                                                                                                                                                                                                                                                                                                                          NOT NEUTROPHILS
QVCIDPKLKWIQ 80
                                                                                                                                                                                                                                                                             600835; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EICADPKQKWIQ
                                                     h 79.4%;
Similarity 66.7%;
8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98046030.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PS00471;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (OCT-1994)
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3 AA;
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66.78;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOETSCHER P., RA. VIRELIZIER J.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL/GENBANK/DDBJ
                                                                                                                              MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WW;
                                                   Score 77; DB 1; I
Pred. No. 3.30e-05;
2; Mismatches 2
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2;
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Pred. No. 3.30e-05
                                                                                                                                                                              POTENTIAL.
STROMAL CE
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BY SIMILARITY.
K -> KRLKM (IN FORM BETA).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTIVE
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                                                                                                                             4B9911C7 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           J.
                                                                                                                                                                                                                                                                                                                                                                                 INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TASHIRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RAJARATHNAM K., AMARA
L., BAGGIOLINI M., SYKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ON T-LYMPHOCYTES,
                                                                                                                                                                                  CELL-DERIVED
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                                                                                                                                                                                                                                                                                                                                                                                                      SPLICING
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                                                                                         Length 93;
                                                                                                                                                                                                                                                                                                                                                                                                                     (ALPHA
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                                                                                                                                                                                  FACTOR
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                                                      Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         MONOCYTES,
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                                                                                                                                                                                                                                     SPLICING
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RESULT 28

RESULT 28

RESULT 1849 (REL. DI MITA_MOUSE ST AC DIAS5; PIA4096; DT 01-JUL-1989 (REL. DT 01-JUL-1999 (R
                                         01-JUL-1989 (REL. 11, CREATED)
01-APR-1990 (REL. 14, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA) (TY-5)
(SIS-ALPHA) (HEPARIN-BINDING CHEMOTAXIS PROTEIN) (L2G25B).
                                                                                                                                                                                                                                                                                                                                      MEDLINE; 88154745.

WOLPE S.D., DAVATELIS G., SHERRY B., BEUTLER B., HESSE D.G., NGUYEN H.T., MOLDAWER L.L., NATHAN C.F., LOWRY S.F., CERAMI A.;

J. EXP. MED. 167:570-581(1988).

-i- function: Monokine with inflammatory, pyrogenic and chemokinetic properties. HAS A POTENT CHEMOTACTIC ACTIVITY FOR EOSINOPHILS.
BINDING TO A HIGH-AFFINITY RECEPTOR ACTIVATES CALCIUM RELEASE IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 91237116.
WIDMER U., YANG Z.,
                                                                                                                                                                                                                                                         -!- TISSUE SPECIFICITY:
-!- SIMILARITY: BELONGS
C-C) (CHEMOKINE CC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE; 89184547.
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 91016858.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE OF 24-42.
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      MGI:98260; SCYA3
                                                                                                                                                                                                                                 LARITY: BLL.
) (CHEMOKINE CC).
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89093958.
D., ZURAWSKI S.M., MOS
OL. 142:679-687(1989).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COIT D., MERRYWEATHER J., CERA
167:1939-1944(1988).
                          1HUM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CERAMI A.;
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                                                                                                                                                                                                                                                                               BETA FAMILY (SMALL
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DISULFID
CARBOHYD
SEQUENCE
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DISULFID
DISULFID
CONFLICT
CONFLICT
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SIGNAL
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NUCLEIC
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p14844;
01-APR-1990 (REL. 14, CREATED)
01-APR-1990 (REL. 14, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (IMMEDIATE-EARLY
                                                                                                                                                                                                                                                                                                                                                                                                    -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC). (C-C) (CHEMOKINE CC).
EMBL; X17053; G55531; -.
EMBL; X17053; G25534; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE; 91128376.
YOSHIMURA T., TAKE
BIOCHEM. BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. MEDLINE; 91128376.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-WAG/RIJ; TI
MEDLINE; 90174947.
TIMMERS H.T.H.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA; METAZOA; EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RATTUS NORVEGICUS (RAT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SERUM-RESPONSIVE JE PROTEIN).
SCYA2 OR JE OR MCP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
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                                                                                                                                                                                                                                                    MOD_RES
                                                                                                                                                                                                                                                                                          SIGNAL
                                                                                                                                                                                                                                                                                                                                PROSITE
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:||||:|: |:|
1 EICADPKQKWIQ
                                        73
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HIMURA T., TAKEYA M., TAKAHASHI K.;
CHEM. BIOPHYS. RES. COMMUN. 174:504-509(1991).
FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NEUTROPHILS
                                                                                                                                                                                                                                                                                                                                                                JN0128; JN0128.
S07723; S07723.
                                    EICADPNKEWVQ 84
  EICADPKQKWIQ 12
                                                                                                                                                                                                                                                                                                                                                    P13500;
                                                                                                Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .M., PRONK G.J., BOS J.L., RES. 18:23-34(1990).
                                                                                                                                                                                                                                                                                                                                                    1MCA.
                                                                                                                                                      AA;
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                                                                                                                                                                                                                                                                                                                              SMALL_CYTOKINES_CC;
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148
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66.7%;
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58.3%;
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Pred.
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BY SIMILARITY.
BY SIMILARITY.
F -> L (IN REF. 3).
V -> A (IN REF. 3).
                                                                                                                                                                                                                                PYRROLIDONE CARBOXYLIC ACID (BY SIMILARITY).
                                                                                                                                                                                                                                                                    INFLAMMATORY RESPONSE; GLYCOPROTEIN. BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN 1.
                                                                                                                                                    POTENTIAL. DB97F97C CRC32;
                                                                                                                                                                                          BY SIMILARITY.
BY SIMILARITY.
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                                                                            Mismatches
                                                                                              74;
No.
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No. 1.67e-04;
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                                                                                              DB 1; L
1.67e-04;
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                                                                                                            Length 148;
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                                     Query Match
Best Local :
Matches
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EMBL; 212297; G57938; -..
EMBL; 104694; G192926; -..
EMBL; S71251; G547089; -..
EMBL; X70058; G437873; -..
PIR; S30592; S30592.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-OCT-1993 (REL. 27, CRE
01-OCT-1993 (REL. 27, LAS
15-JUL-1998 (REL. 36, LAS
MONOCYTE CHEMOTACTIC PROT
CHEMOATTRACTANT PROTEIN 3
SCYA7 OR MCP3 OR FIC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-OCT-1993
01-OCT-1993
15-JUL-1998
                                                                                                                                          DISULFID
DISULFID
CARBOHYD
CONFLICT
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JARMIN D.I., KULMBURG P.A., HUBER N.E., BAUMANN G.,
PRIESCHL-STRASSMAYR E.E., BAUMKUKER T.;
J. IMMUNOL. 153:5720-5729(1994).
-I. FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND
EOSINOPHILS, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE ANTI-TUMOR
ACTIVITY (BY SIMILARITY).
-I. SUBUNIT: MONOMER (BY SIMILARITY).
-I. SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MCP3_MOUSE
Q03366;
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TISSUB-MAST CELLS;
MEDLINE; 93094785.
KULMBURG P.A., HUBER N.E.,
J. EXP. MED. 176:1773-1778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
MEDLINE; 93204948.
HEIMRICH J.N., RYSECK R.P., MACDONALD-BRAVO
MOL. CELL. BIOL. 13:2020-2030(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 94271193.
THIRION S., NYS G.,
OPDENAKKER G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MUS MUSCULUS (MOUSE)
EUKARYOTA; METAZOA;
                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                 MGD; MGI:9951
PROSITE; PS00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. MEDLINE; 95081620.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WERNER
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                                                                                                                                                                                                                                                              MOD_RES
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                                                                                                                                                                                                                                                                                                        SIGNAL
                                                                                                                                                                                                                                                                                                                                                CYTOKINE;
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71
EVCAEAHQKWVE 82
                                                          Similarity
                                                                                                                                                                                                                                                                                                                                          PS00472; SMALL_CYTOKINES_CC; 1.
; CHEMOTAXIS; HEPARIN-BINDING; GLYCOPROTEIN; SIGNAL;
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24 97
24 24
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74
                                       Conservative
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                                                                                                                                                                                                                                                                                                                                                                                    SCYA7.
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27, LAST SEQUENCE UPDATE)
36, LAST ANNOTATION UPDATE)
TIC PROTEIN 3 PRECURSOR (MCP-3)
ROTEIN 3) (INTERCRINE/CHEMOKINE
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73
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(1992).
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Pred.
5; N
                                                                                                                                                                                                   PYRROLIDONE CARBOXYLIC ACID SIMILARITY).
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                      MISSING (IN REF.
                                                                                                                                                                                                                                                                                     MONOCYTE CHEMOTACTIC PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERTEBRATA; TETRAPODA; MAMMALIA;
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                                                                                                                       682F557E
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                                       Mismatches
                                                      73; DB 1;
No. 2.86e-04
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                                                                                                                       CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WRANN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VAN DAMME
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`
                                                                           Length
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                                       Indels
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Search completed: Thu Apr  $1\ 07:41:44\ 1999$  Job time : 7 secs.

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1 79 81.4 395 11 035933 PERACTALKINE. 1.26e-04 2 79 81.4 395 11 035183 NEUROTACTIN. 1.26e-04 3 75 77.3 119 4 000175 MPIF-2. 9.50e-04 4 74 76.3 97 11 089093 BETA CHEMOKINE EXODUS- 1.56e-03 5 74 76.3 97 11 089093 BETA CHEMOKINE EXODUS- 1.56e-03 7 71 73.3 92 11 088430 CC CHEMOKINE EXODUS- 1.56e-03 7 71 73.2 97 13 057411 LYMPHOTACTIN PRECURSOR 6.85e-03 7 72 80 4 014745 LYMPHOTACTIN PRECURSOR 6.85e-03 7 72 95 4 029664 CHEMOKINE EXODUS- 1.11e-02 9 70 72.2 95 4 029664 CHEMOKINE EXODUS- 1.11e-02 11 68 70.1 109 11 055038 BLYMPHOCYTE CHEMOATTR 2.91e-02 11 68 70.1 120 4 015467 IL-10-INDUCIBLE CHEMOK 2.91e-02 11 66 68.0 91 4 043646 RANTES PRECURSOR 7.51e-02 16 65 67.0 99 4 043646 RANTES PRECURSOR 7.51e-02 17 65 67.0 397 4 098158 CR FRECURSOR 7.51e-02 18 64 66.0 93 4 000656 MACROPHAGE-DERIVED CHE 1.20e-01 19 64 66.0 133 11 009006 BETA CHEMOKINE EXODUS- 1.91e-01	No. is the number of results predicted by chance to have a e greater than or equal to the score of the result being printe is derived by analysis of the total score distribution.  SUMMARIES  Query  Query  Query  Ouery  Description  Pred.	Database: sptrembl8 1:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human 5:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organelle 9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclassified 13:sp_vertebrate 14:sp_virus Statistics: Mean 25.578; Variance 35.065; scale 0.729	Title: >US-08-927-939-13 Description: (1-12) from USO8927939.pep Perfect Score: 97 Sequence: 1 EICADPKQKWIQ 12 Scoring table: PAM 150 Gap 15 Searched: 180763 seqs, 55169189 residues Post-processing: Minimum Match 0% Listing first 100 summaries	**************************************
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100 14 1188 5 215 3 257 11 336 5 338 5 573 2 629 5 723 1 823 4 823 4 823 4 823 4 1038 10 11038 10 10 10 10 10 10 10 10 10 10 10 10 10 1	724 10 825 2 841 5 852 14 1589 5 1825 5 1825 5 1872 11 2276 7 94 14	949 5 991 10 2919 14 146 14 146 14 172 2 202 14	26926 4 95 14 117 10 143 2 145 2 248 10 350 3 397 3 397 3 496 10 497 10 497 10 852 10 853 10	760 3 099126 9 109 4 043927 9 1053 2 084834 8 399 14 068409 8 522 5 061090 8 982 5 093290 8 187 2 083516 8 203 14 067634 8 1224 5 P91309 9 5 2 P70808 307 10 065736 7 730 10 065736 7 108 11 070460 7 1178 2 031562 7 192 10 023536 7 193 10 073912 7 208 5 046178 7 208 5 046178 7 208 5 046178
GLYCOPROTEIN LYASE C. LYASE C. TELL MEMBRANE G COR. TICAL 66.1 KD P MERASE II LARG ACTOSIDASE (EC PROTEIN. A. THA. ONE CONVERTASE TYEASE. TYEASE. TYEASE. TYEASE TOE GENE HOMOLO FORMATE-LYASE	CTOSIDASE (EC CTAL 92.5 KD p PROTEIN Y122 GLYCOPROTEIN. PROTEIN (FRAG PROTEIN (FRAG FRAGMENT GLYCOPROTEIN		TEIN E (FR KD P NE-1- SMID 4.4.1 NE-1- NE-1- NE-1-	CHITIN SYNTHETASE I. CXC CHEMOKINE PRECURSO RIBONUCLEOSIDE REDUCTA ORF ULL54. SERINE RICH PROTEIN HO HYPOTHETICAL 21.4 KD P ECO Q PROTEIN (FRAGMEN CODED FOR BY C. ELEGAN ATP BINDING PROTEIN (F BETA-GALACTOSIDASE (EC BETA-GALACTOSIDASE (EC EBI-1 LIGAND CHEMOKINE YFIT PROTEIN RESISTANCE GENE HOMOLO 2-HYDROXY-6-OXO-7-METH ENVELOPE GLYCOPROTEIN COMNY MILDEW RESISTANC K60 PROTEIN PRECURSOR. MANNOSE-SENSITIVE HEMA RADIAL SPOKEHEAD. CULA. CULA.
5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01 5.27e+01	3.53e+01 3.53e+01 3.53e+01 3.53e+01 3.53e+01 3.53e+01 3.53e+01 3.53e+01 5.27e+01	2.35e+01 2.35e+01 3.53e+01 3.53e+01 3.53e+01 3.53e+01 3.53e+01 3.53e+01	1.55e+01 2.35e+01 2.35e+01 2.35e+01 2.35e+01 2.35e+01 2.35e+01 2.35e+01 2.35e+01 2.35e+01 2.35e+01 2.35e+01 2.35e+01 2.35e+01 2.35e+01 2.35e+01 2.35e+01 2.35e+01	1.91e-01 4.77e-00 1.12e+00 2.83e+00 2.83e+00 4.36e+00 4.36e+00 6.70e+00 6.70e+00 6.70e+00 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.02e+01 1.0

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Best Local S
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035188 PRELIMINARY;
035188;
01-JAN-1998 (TREMBLREL. C
01-JAN-1998 (TREMBLREL. C
01-JAN-1998 (TREMBLREL. C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ULT 1
035933 PRELIMINARY;
035933;
01-JAN-1998 (TREMBLREL 0
01-JAN-1998 (TREMBLREL 0
01-NOV-1998 (TREMBLREL 0
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MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.

STRAIN-BALB/C: TISSUE-BRAIN;

STRAIN-BALB/C: TISSUE-BRAIN;

ROSSI D., HARDIMAN G., COPELAND N., GILBERT D.J., JENI

ROSSI D., BAZAN J.F.;

SUBMITTED (MAR-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

EMBL; U92565; G2459677; -.

PFAM; PF00048; il8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Neurotactin, a membrane-anchored inflammation.";

Namine """

"Neurotactin, a membrane-anchored inflammation.";
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EUKARYOTA; METAZOA; CHORDATA; V
SCIUROGNATHI; MURIDAE; MURINAE;
                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                    NATURE 387:611-617(1997).
EMBL; AF010586; G2317698; -.
MGD; MGI:1097153; SCYD1.
PFAM; PF00048; i18; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 97320499.

PAN Y., CLARE L., HONG Z., DOLICH S., E
GOSSELIN M., MA J., DUSSAULT B., WOOLF
GUTIERREZ-RAMOS J.C., GEARING D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM
MEDLINE; 97320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NEUROTACTIN.
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Local Similarity 72.7%;
nes 8; Conservative
                                                                                                               73 FCADPKERWVQ 83
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larity 72.7%;
Conservative
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                                                                                                                                                                                    Score 79; DB 11;
Pred. No. 1.26e-04;
3; Mismatches 0
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Pred. No. 1.26e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
E; MUS.
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E; MUS.
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Best Local Similarity
Matches 7; Consei
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NARDELLI B., PIPPALLA V., GE
GENTZ R., GAROTTA G.;
J. EXP. MED. 0:0-0(0).
EMBL; U85768; G1916252; -.
PFAM; PF00048; 118; 1.
SEQUENCE 119 AA; 13119 MY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    000175
000175;
01-JUL-1997
01-JUL-1997
01-NOV-1998
TLT 5
000585
000585;
01-JUL-1997
01-JUL-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                        O89093 PRELIMINARY;

O89093;

O1-NOV-1998 (TREMBLREL 08,

O1-NOV-1998 (TREMBLREL 08,
                                                                                                                                                                                          CHAIN
                                                                                                                                                                                                                                                                                                                                                                             MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
RODENTIA; SCIUROGNATHI; MURIDAE; MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                          SUBMITTED (JUL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; AF053313; G3551819; -. EMBL; AJ007862; E1312757; -.
                                                                                                                                                                                                                                                                                               "A novel rat CC chemokine, id display, is upregulated in br J. NEUROIMMUNOL. 0:0-0(1998).
                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
UTANS-SCHNEITZ U., LOREZ H.,
                                                                                                                                                                                                                                                                                                                                                                                                                    LARC
                                                                                                                                                                              SEQUENCE
                                                                                                                                                                                                     SIGNAL
                                                                                                                                                                                                                  SIGNAL.
                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. VILLARES R.;
                                                                                                                                                                                                                                                                                                                                                                                                                              CC CHEMOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MPIF-2
                                                                                                                                                                                                                                                                                                                                    LESSLAUER W.;
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                                                                                             74 VCADPKQNWV 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            72
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                                                                                   N
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                                                                                   ICADPKOKWI
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3 (TREMBLREL.
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(TREMBLREL.
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llarity 58.3%;
Conservative
                                    PRELIMINARY;
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                                                                                                                                 Conservative
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28
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70.0%;
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brain inflammation.";
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Pred. No.
4; Misma
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                               Score 74; DB 11;
Pred. No. 1.56e-03;
3; Mismatches 0
CREATED)
LAST SEQUENCE UPDATE)
                                                                                                                                                                             POTENTIAL.
CC CHEMOKINE ST38
053405BD CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRT;
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THOTAKURA
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9.50e-04;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DA SILVA J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 119;
                                                                                                                                 0;
                                                                                                                                                       Length
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PARMELEE D.,
                                                                                                                                 Indels
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Best Local
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088430;
01-NOV-1998 (TREMBLREL. 08
01-NOV-1998 (TREMBLREL. 08
01-NOV-1998 (TREMBLREL. 08
CC CHEMOKINE ABCD-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NISHIMURA M., KAKIZAKI M., NOMIYAMA H., YOSHIE O.;
SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; U88320; G2196920; -.
EMBL; AF001979; G2624925; -.
EMBL; AB002409; D1022673; -.
PFAM; PF00048; 118; 1.
SEQUENCE 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CC CHEMOKINE ABCD-1.
CC CHEMOKINE ABCD-1.
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
EUKARYOTA; MORINAE; MURIDAE; MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-NOV-1998 (TREMBLREL. 08, LABETA CHEMOKINE EXODUS-2.
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                             "Activated murine B lymphocytes and dendritic cells produce a CC chemokine which acts selectively on activated T cells."; J. EXP. MED. 188:451-463(1998).
EMBL; AF052505; G3378116; ".
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Identification and characterization containing six conserved cysteines.", J. IMMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                SIDERAS P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              SHIMIZU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCHANIEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE-LIVER;
MEDLINE; 9835
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SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUBMITTED (JUN-1997)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 L C., PARDALI E., SALLUSTO F., SPELETAS M., RUEDL C., T., SEIDL T., ANDERSSON J., MELCHERS F., ROLINK A.G.
                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98353531.
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                                                                                                                                                                                                                                                               92 AA;
                                                                                                                               Conservative
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66.7%;
                                                                                                                                                                                                                                                               10302 MW;
                                                                                                                                                             75.3%;
63.6%;
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                                                                                                                                                                 Pred.
                                                                                                                                                                                           Score
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Pred. No. 1.56e-03
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                                                                                                                                                             73; DB 11;
No. 2.57e-03;
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MUS.
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O57411;
O57411;
O1-7UN-1998 (TREMBLREL. 06, CREATED)
O1-JUN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)
O1-JUN-1998 (TREMBLREL. 06, LAST ANNOTATION UPDATE)
LYMPHOTACTIN PRECURSOR.
GALLUS GALLUS (CHICKEN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ARCHOSAURIA; AVES;
EUKARYOTA; METAZOA; PHASIANIDAE; PHASIANINAE; GALLUS.
                O99664 PRELIMINARY;
O99664;
O1-MAY-1997 (TREMBLREL. O
01-MAY-1997 (TREMBLREL. O
01-NOV-1998 (TREMBLREL. O
                                                                                                                                                                                                                                                                                                                                 LT 8

O14745

O14745

O1-NOV-1996 (TREMBLREL 01, CREATED)
O1-NOV-1996 (TREMBLREL 01, LAST SEQUENCE UPDATE)
O1-NOV-1998 (TREMBLREL 08, LAST ANNOTATION UPDATE)
LD78 ALPHA BETA PRECURSOR (FRAGMENT).
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL
CHAIN
                                                                                                                                                                                                                                        SUBMITTED (AUG-1995) TO EMBL/GENBANK/DDBJ EMBL; D63785; G961440; -. PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL; AF006742; G2827882;
HOMO SAPIENS (HUMAN)
           CHEMOKINE EXODUS
                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                   NON TER
                                                                                                                                                                                           CHAIN
                                                                                                                                                                                                    SIGNAL
                                                                                                                                                                                                                                                                            ISHIZUKA K., IGATA-YI
KATSURAGI S., KIN Y.,
                                                                                                                                                                                                                                                                                      TISSUE-BRAIN;
ISHIZUKA K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ROSSI D.L., BAZAN J.F., ZLOTNIK A.; SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                              NON_TER
                                                                                                                                                                                                                               PFAM; PF00048; il8; 1.
                                                                                                                                                                                                                                                                     MIYAKAWA T.
                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                             CATARRHINI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-SPLEEN;
                                                                                                                65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                72
                                                                                             ب
                                                                                                                                                                                                                                                                                                                                                                                                                                             N
                                                                                                       QVCADPSEEWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ICVHPEQKWVQ
                                                                                             EICADPKQKWIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                             ICADPKQKWIQ
                                                                                                                                  Similarity 50.0%, 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97 AA;
                                                                                                                                                                        80 AA;
                                                                                                                                                                                                                                                                                                                             HOMINIDAE;
                                                                                                                                                                                  81741
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25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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                                                                                                               76
                                                                                                                                            72.2%;
50.0%;
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>80
                                                                                                                                                                        8857 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24
97
                                                                                                                                                                                                                                                                             R., NARUSE
OHMOTO Y.,
                                                                                                                                                                                                                                                                                                                              HOMO
                  80,0
                 CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                Score 70; DB 4; I
Pred. No. 1.11e-02;
4; Mismatches 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 71; DB 13; Lo
Pred. No. 6.85e-03;
1; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      POTENTIAL.
LYMPHOTACTIN.
3290101C CRC
                                                                                                                                                                        3F87F1C6 CRC32;
                                                                                                                                                                                          LD78 ALPHA
                                                                                                                                                                                                                                                                              K., NAKASHIMA
NOMIYAMA H., I
                                                                                                                                                                                           ALPHA BETA
                                                        95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CRC32;
                                                       B
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                                                                                                                                                                                                                                                            DATA
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                                                                                                                                                   Length 80;
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                                                                                                                                                                                                                                                                                        OHUCHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97;
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                                                                                                                                 Gaps
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RESULT 10

ID P97884

AC P97884;

AC P97884;

AC P97884;

AC P97884;

DT 01-MAY-1997 (TREMBLREL 0: 0: 0.0.0-0.0198)

DT 01-NOY-1998 (TREMBLREL 0: 0: 0.0.0-0.0188)

DE CC CHEMORINE EXODUS.

OC EUKARYOTA; METAZOA; CHORDI
OC SCIUROGNATHI; MURIDAE; MUI
RN [1]

RP SEQUENCE FROM N.A.

RC STRAIN-SPRAGUE-DAWLEY;

RA KELNER G.S., MACIEJEWSKI-1
RL SUBMITTED (FEB-1997) TO EN
RN [2]

RP SEQUENCE FROM N.A.

SETRAIN-FISHER 344; TISSUE-
RA LESSLAUER W.;

RA LESSLAUER W.;

RI J. NEUROIMMUNOL. 0: 0-0-0[3]

DR EMBL; 090447; G1899246; --
DR EMBL; 090448; 118; 1.

KW SIGNAL.

SQ SEQUENCE 96 AA; 10875 N.
RESULT 11

ID 055038;
AC 055038;
DT 01-JUN-1998 (
DT 01-JUN-1998 (
DT 01-NOV-1998 (
DT 01-NOV-1998 (
DE B LYMPHOCYTE
OS MUS MUSCULUS
OC EUKARYOTA; ME
OC SCIUROGNATHI;
                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Вþ
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Best Local :
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Best Local
                                                                                                                                                                                                                            Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATARRHINI; [1]
                                                                                                                                                                                                                                                                                                                                                                                                [2]
SEQUENCE FROM N.A.
STRAIN-FISHER 344; TISSUE-BRAIN;
STRAIN-FISHER 344; LOREZ H., KLI
 B LYMPHOCYTE CHEMOATTRACTANT BLA
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; YI
SCIUROGNATHI; MURIDAE; MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
STRAIN-SPRAGUE-DAWLEY;
KELNER G.S. MACHENDEWSKI-LENOIR D., LEE E.
KELNER G.S., MACHENDEWSKI-LENOIR D., LEE E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Cloning and characterization of exodu B9:3315-3322(1997).
EMBL, U64197, G17789717;
PROSITE: PS00472; SMALL_CYTOKINES_CC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE; 97275143.
HROMAS R., GRAY P.W., CHANTRY BELL G.I., TAKEDA J., ARONICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LURAKIUTA; METAZOA; CHÖRDATA;
SCIUROGNATHI; MURIDAE; MURINA
[1]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KLEMSZ M.J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE-PANCREAS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                                                                                                                                'A novel rat CC chemokine, identified by targeted differential display, is upregulated in brain inflammation.";
                                                                                                                                                                      Local Similarity nes 7; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity les 6; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             72 VCANPKQTWV 81
                                                                                                                                                                                                                                                                                                         splay is upregulated in branch MEUROIMMUNCL 0:0-0(1998). BL; U90447; G1892446; -. BL; AF053312; G3551817; -. BM; PF00048; il8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ICADPKQKWI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PF00048; il8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95 AA;
                                        (TREMBLREL. 06, CREATED)
(TREMBLREL. 06, LAST SEQUENCE UPDATE)
(TREMBLREL. 08, LAST ANNOTATION UPDATE)
E CHEMOATTRACTANT BLC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HOMINIDAE;
                                                                                                                  PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          72.2%;
larity 60.0%;
Conservative
                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10691 MW;
                                                                                                                                                                                                                                         72.2%;
70.0%;
                                                                                                                                                                                                                                                                                  10875 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       803,
                                                                                                                                                                                                                          Score 70; D
Pred. No. 1.
2; Mismatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CREATED)
LAST SEQUENCE UF
LAST ANNOTATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 70; DB 4; 1
Pred. No. 1.11e-02
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                          KLINKERT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             s:,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
E; RATTUS.
  VERTEBRATA;
E; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1526B4C0 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT;
                                                                                                                PRT;
                                                                                                                                                                                                                                                                                  3FC09DD8 CRC32;
                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  exodus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GODISKA R.,
GORDON M.,
                                                                                                                109
                                                                                                                                                                                                                                                                                                                                                                                                        W.E.F.,
                                                                                                                                                                                                                                         DB 11;
1.11e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    UPDATE)
               MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COOPER S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                               MAKI R.A.;
A BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                        DA SILVA J.,
                                                                                                                                                                                                                            ب
• •
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1;
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                                                                                                                                                                                                                                                    Length 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   beta-chemokine.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                           Indels
                 EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BROXMEYER H.E.,
                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FIFE
               RODENTIA;
                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
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SEQUENCE FROM N.A.

C STRAIN-C57BL/6J;

CX MEDLINE; 98146056;

RA MEDLINE; NGO V.N., ANSEL K.M., EKLAND E.H., CYS
RA GUNN M.D., NGO V.N., ANSEL K.M., EKLAND E.H., CYS
RA B-Cell-homing chemokine made in lymphoid foll
RT Burkit's lymphoma receptor-1.";
RL NATURE 391:799-803(1998).

RR NATURE 391:799-803(1998).

RM LEMBL; AF044196; G2911374; -.

EMBL; AF044196; G2911374; -.

CMBL; AF044196; G2911374; -.
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Best Local S
Matches
                                                         Query Match
Best Local :
                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ULT 12
015467; PRELIMINARY;
015467; PREMBLREL 05,
01-JAN-1998 (TREMBLREL 05,
01-NOV-1998 (TREMBLREL 08,
1L-10-INDUCIBLE CHEMOKINE.
                                                                                             SIGNAL.
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ILINCK OR SCYA16.
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                      EMBL;
                                                                                                                                                                                                                                                                                                                                             SHOUDAI K., HIESHIMA K., FUKUDA S., YOSHIE O., NOMIYAMA H.; BIOCHIM. BIOPHYS. ACTA 0:0-0(1998).
                                                                                                                                                                                                     "Isolation and characterization of LMC, a no monocyte chemoattractant human CC chemokine,
                                                                                                                                                                                                                            YOUN B.S., ZHANG S., HANGOC G., KWON B.S.
                                                                                                                                                                                                                                                                                    "Structure of a region of SUBMITTED (AUG-1998) TO
                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. NOMIYAMA H.;
                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
HEDRICK J.A., HELMS A.,
SUBMITTED (NOV-1997) TO
                                                                                                                                            EMBL;
                                                                                                                                                                  BIOCHEM. BIOPHYS. RES. COMMUN.
EMBL; U91746; G2581781; -.
                                                                                                                                                                                                                 "Isolation and characterization
                                                                                                                                                                                                                                                              SEQUENCE FROM N.
                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                   MEDLINE; 98308096.
                       74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              74 ICVNPRAKWLQ
  ₽.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N
EICADPKQKWIQ 12
                       EVCTNPNDDWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ICADPKQKWIQ
                                                                                                                            NB007454; G2581781; -. AB007454; D1024963; -. AF088219; G3719365; -. AF055467; G3395776; -.
                                                                                                                     PF00048; il8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                            Similarity
                                                                                             120
                                             70.1%;
llarity 41.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   70.1%;
llarity 54.5%;
Conservative
                                                                                              AA;
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                       85
                                                                                             13600
                                                                                                                                                                                                                                       BROXMEYER H.E.,
                                                                                                                                                                                                                                                                                     of 181 kb containing five CC (
D EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80,0
                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                               GORMAN D.,
                                                                                              ¥.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 68;
Pred. No.
3; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                             Score 68; DB 4; I
Pred. No. 2.91e-02;
6; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERTEBRATA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                               247:217-222(1998).
                                                                                              A079DF66 CRC32;
                                                                                                                                                                                                                                                                                                                                                                    s:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No. 2
                                                                                                                                                                                                                                                                                                                                                                                                                               ZLOTNIK A.;
                                                                                                                                                                                                                                                                                                                                                                      OII
                                                                                                                                                                                                                                       ANTOL K., FRASER M.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 11,
2.91e-02;
2.92 2;
                                                                                                                                                                                                                                                                                                                                                                      3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A
                                                                                                                                                                                                    novel lymphocyte and ne, with myelosuppres
                                                                                                                                                                                                                                                                                                                                                                      MIURA R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 follicles
                                                                      Length 120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CYSTER J.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                              Indels
                                                                                                                                                                                                     myelosuppressive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                                                                 chemokine
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                                                                                                                                                                                                                                                                                                                                                                      IMAI
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                                                                                                                                                                                                                                       JR.,
                                                                                                                                                                                                                                                                                                                                                                      Τ.,
                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                genes.";
                                              Gaps
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RESULT OLD DIT OLD DIT
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DT 011
DT
        RESULT
ID 00
AC 00
DT 00
DT 00
DT 00
DT 10
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Best Local S
Matches
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Best Local S
Matches
O62812 PRELIMINARY;
O62812;
O1-AUG-1998 (TREMBLREL. 0
01-AUG-1998 (TREMBLREL. 0
01-AUG-1998 (TREMBLREL. 0
INTERLEUKIN-8 (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "cDNA cloning of a car
eotaxins.";
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043646
043646;
01-JUN-1998
01-JUN-1998
01-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LT 13
093238
093238;
01-NOV-1998 (TREMBLREL 08, CREATED)
01-NOV-1998 (TREMBLREL 08, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL 08, LAST ANNOTATION UPDATE)
01-NOV-1998 (TREMBLREL 08, LAST ANNOTATION UPDATE)
CC CHEMOKINE-1.
CYPRINUS CARPIO (COMMON CARP).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ACTINOPTERYGII; NEOPTERYGII;
TELEOSTEI; EUTELEOSTEI; OSTARIOPHYSI; CYPRINIFORMES; CYPRINOIDEA;
CYPRINIDAE; CYPRININAE; CYPRINUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIGNAL
CHAIN
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Structure of a region of 181 kb containing five CC oSUBMITTED (AUG-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.EMBL; AF043341; G2905632; -.
EMBL; AF088219; G3719366; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
JANG J.S., KIM B.E.;
SUBMITTED (JAN-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OMOH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATARRHINI;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                       71 QVCANPEKKWVR ::||:| ||::
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RYOTA; METAZOA; CHORDATA;
RRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EICADPKQKWI 11
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Pred. No.
4; Misma
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Pred. No. 7.51e-02;
5; Mismatches 2;
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No. 4.68e-02;
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Q98158; 012569;
01-FEB-1997 (TRE
01-JUL-1997 (TRE
01-NOV-1998 (TRE
                                                              NEIPEL F., ALBRECHT J.C., FLECKENS "Cell-homologous genes in the Kapchuman herpesvirus 8: determinants J. VIROL, 71:4187-4192(1997).
                                                                                                                                                                                       RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA 1
                                                                                                                                                                                                                                                                          NICHOLAS J., RUVOLO 'HENDRICKSON S., GUO | SUBMITTED (NOV-1996)
                                                                                                                                                                                                                                                                                                                                                                RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHI
PARRY J.P., PERUZZI D., EDELMAN I.S., CHAN
SUBMITTED (OCT-1996) TO EMBL/GENBANK/DDBJ
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MEDLINE; 97121480:

RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M.

RUSSO J.J., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE

PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE

"Nucleotide sequence of the Kaposi sarcoma-associated
""Nucleotide sequence of the Kaposi sarcoma-associated
""Nucleotide sequence of the Kaposi sarcoma-associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
MEDLINE; 97094384.
MOORE P.S., BASHOFF C.,
"Molecular mimicry of h
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EQUUS CABALLUS (HORSE).
EUKARYOTA; METAZOA; CHORDATA;
PERISSODACTYLA; EQUIDAE; EQUUS
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TISSUE-BRONCHOALVEOLAR TISSUE;
 SUBMITTED (SEP-1996) TO EMBL/GENBANK/DDBJ DATA BANKS
                   SEQUENCE FROM N.A. SUN R., LIN S.-F.,
                                                                                                                                   SEQUENCE FROM N.A. MEDLINE; 97296220.
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SCIENCE 274:1739-1744(1996).
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H.G., HAYWARD G.S., RI
) TO EMBL/GENBANK/DDBJ
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                                                                         FLECKENSTEIN B.;
the Kaposi's sarcoma-associated
rminants of its pathogenicity?";
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S., REITZ M.S.;
ODBJ DATA BANK
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                                                                                                                                                                                         , YAN M.,
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BANKS.
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P78423; 000672;
01-MAY-1997 (TREMBLREL. 03
01-MAY-1997 (TREMBLREL. 03
01-NOV-1998 (TREMBLREL. 08
CX3C CHEMOKINE PRECURSOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; U75698; G1718266;
EMBL; U74585; G1658273;
EMBL; U93872; G2246546;
EMBL; U71366; G3551763;
PFAM; PF00048; 118; 1.
HYPOTHETICAL PROTEIN.
                                                                                                                                                                                                                                                                                                                            O00626;
                                                                                                                                                                           01-JUL-1997 (TREMBLREL. 04, 0
01-JUL-1997 (TREMBLREL. 04, 1
01-NOV-1998 (TREMBLREL. 08, 1
MACROPHAGE-DERIVED CHEMOKINE
MDC OR A-152E5.1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BAZAN J.F., BACON K.B., HARDIM
GREAVES D.R., ZLOTNIK A., SCHAL
"A new class of membrane-bound
NATURE 385:640-644(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P78423
      GODISKA
                                    SEQUENCE
                                                                                     HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL; AC004382; G3252821; -. PFAM; PF00048; il8; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Homo sapiens Chromosome 16 BAC clone CIT987SK-A-1521
SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS
EMBL; U91835; G1899259; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE EXCURING N.C. ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., EUHKERANN C., BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.;
"""" Sapiens Chromosome 16 BAC clone CIT9875K-A-152E5.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. MEDLINE; 97177111.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HYPOTHETICAL PROTESEQUENCE 95 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 74 QICADPSKNWVR 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      73 FCADPKEQWV 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 ICADPKQKWI 11
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6; Conser
FROM N.A.
R., CHANTRY D.,
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397 ,
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42202
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., SCHALL T.J.;
e-bound chemokine with
      RAPORT
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                                                                                                                                                                                                          LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
E PRECURSOR.
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LAST ANNOTATION UPDATE)
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Pred.
4; M
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Pred. No. 1.20e-01
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CX3C CHEMOK
C C8093D7D
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                                                                                                                       VERTEBRATA;
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   С.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
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093D7D CRC32;
   SOZZANI S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             397
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1.20e-01;
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                                                                                                                       MAMMALIA;
                                                                                                                                                                                                                                         UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 397;
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                                                                                                                       EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EUTHERIA; PRIMATES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                motif.";
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009002; OTREMBLREL 04, CR
01-JUL-1997 (TREMBLREL 04, LI
1 01-NOV-1998 (TREMBLREL 08, LI
1 01-NOV-1998 (TREMBLREL 08, LI
                                                              SUBMITTED (MAX-1997) TO EMBL/(
EMBL; AF006637; G2209189; -.
EMBL; AF001980; G2624927; -.
MGD; MG1:1097677; SCYA21.
PFAM; PF00048; 118; 1
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    [2]
SEQUENCE FROM N.A.
CHANG M.S., MCNINCH J., ELIAS III C., MANTHE: CHANG T., BOONE T., ANDREW D.P.;
MENG T., BOONE T., ANDREW D.P.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHAIN
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J., BRANDON R., KIM U.J., KERLAVAGE A.R., VENYER J.C.; "HOMO SAPIENS Chromosome 16 BAC clone CIT987SK-A-152E5."; SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; U83171; G1931581; --
EMBL; U8329; G2052425; --
EMBL; W6004382; G3352820; --
EMBL; AC004382; G3352820; --
EFRAM; PF00048; 118; 1.
                                                                                                                                                                                                                                                                                                    MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VI
SCIUROGNATHI; MURIDAE; MURINAE;
                                                                                                                                                                                                                                       TANABE S., LU Z., LUO Y., QUACKENBUSH E.J., BERMAN M. COLLINS-RACIE L.A., MI S., REILLY C., LO D., JACOBS F. SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
ADAMS M.D., LOFTUS B.,
BRANDON R., KIM U.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MANTOVANI A.,
J. EXP. MED.
                                                                                                                                                           "Identification and characterization containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                                     TISSUE-THYMUS;
                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIGNAL.
                                                                                                                                                                                                        MEDLINE;
                                                                                                                                                                                                                   SEQUENCE FROM N.A.
73
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 63.68 nes 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 EICADPKQKWI 11
ELCANPEEGWVQ 84
                    Similarity
6; Conse
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25
AA;
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185:0-0(0).
                     Conservative
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93
10580
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Pred. No.
2; Misma
                    Score
Pred.
4; M
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LAST ANNOTATION UPDAT
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MACROPHAGE-DERIVED CHEMOKINE
65EA63D2 CRC32;
                                                                                                                                                                                                                                                                                                         VERTEBRATA;
E; MUS.
                                                              C0532523 CRC32;
                   re 64; DB 11;
1. No. 1.91e-01
Mismatches
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LO D., JACOBS K.A.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 4;
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                                                                                                                                                                                                                                                                                                                   MAMMALIA;
                                                                                                                                                                                   novel
                                                                                                                                                                                                                                                                                                                                                             UPDATE)
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                                       Length 133;
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                     Indels
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                                                                                                                                                                                   chemokine
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                    0;
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                   Gaps
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Q99126;
Q99126;
O1-NOV-1996 (TREMBLREL. 0
O1-NOV-1996 (TREMBLREL. 0
O1-MAY-1997 (TREMBLREL. 0
JLT 22
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043927;
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01-JUN-1998
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009006
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MUS MU
                                                                                                                                              STRAIN-RK32 (A2B3);

XOCONOSTLE-CARARES B., LEON-RAMIREZ C.,

MICROBIOLOGY 142:377-387(1996).

EMBL; X87748; G861151; -.

SEQUENCE 760 AA; 85181 MW; 2F24C4C9
                                                                                                                                                                                                                         USTILAGO MAYDIS (SMUT FUNGUS).
EUKARYOTA; FUNGI; BASIDIOMYCOTA;
                                                                                                                                                                                                                                                       CHITIN SYNTHETASE
                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                         SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ EMBL; U88322; G3169697; -. MGD; MGI:1097677; SCYA21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=TOTAL FETUS;

MEDLINE; 9744139.

HROMAS R. KIM C.H., KLEMSZ M., KRATHWOHL M.,

SCHNIZLEIN-BICK C., BROXMEYER H.E.;

"ISOlation and characterization of Exodus-2, a

"Isolation and characterization of with a unique 37-amino acid carboxyl-terminal

J. IMMUNOL. 159:2554-2558(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-AUG-1998
01-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    009006;
01-JUL-1997
                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                 USTILAGINOMYCETIDAE; USTILAGINALES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SCIUROGNATHI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE=TOTAL FETUS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                            483 EICAETKGKW 492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ROMAS R.A.;
                                                                                                                   Local Similarity
                                                                   μ.
                                                                                                                                                                                                                                                                                                                                                                73
                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MUSCULUS (MOUSE).
ARYOTA; METAZOA; CHORDATA; VERTEBRATA;
UROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JUL-1997 (TREMBLREL. AUG-1998 (TREMBLREL. NOV-1998 (TREMBLREL. A CHEMOKINE EXODUS-2.
                                                                                                                                                                                                                                                                                                                                                        ELCANPEEGWVQ 84
                                                                     EICADPKOKW
                                                                                                                                                                                                                                                                                                                                              EICADPKQKWIQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                  PF00048;
                                                                                                                                                                                                                                                                                                                                                                                                                         133 AA;
(TREMBLREL.
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70.0%;
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Pred. No.
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LAST SEQUENCE UI
LAST ANNOTATION
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Pred. No. 1.91e-01
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LAST SEQUENCE UPDATE)
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ES; USTILAGINACEAE;
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No. 1.91e-01;
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Best Local Similarity
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084834;
084834;
01-NOV-1998
01-NOV-1998
01-NOV-1998
                                                                                                                                                                                                       "Genome Sequence of an Chlamydia trachomatis.' SCIENCE 0:0-0(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                               01-NOV-1998 (TREMBLREL. 08
01-NOV-1998 (TREMBLREL. 08
01-NOV-1998 (TREMBLREL. 08
RIBONUCLEOSIDE REDUCTASE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHAIN
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NAPOLITANO M., SPINETTI G., GAETANO C., CAPOGROSSI C.
SUBMITTED (OCT-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
EMBL; AJ002211; E1249325; -.
EMBL; AF044197; G2911376; -.
EMBL; AF029894; G3169814; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LEGLER D.F., LOETSCHER M., STUBER ROOS R. BAGGIOLINI M., MOSER B.;
"B cell-attracting chemokine 1, a human C lymphoid tissues, selectively attracts B J. EXP. MED. 187:655-660(1998).
                                    EMBL; AE001355; SEQUENCE 1053
                                                                                                        STRAIN-D/UW-3/CX;
STEPHENS R.S., KALMAN S., LAMMEL C.J.,
MITCHELL W.P., OLINGER L., TATUSOV R.L
                                                                                                                                                                                                                                                                             STEPHENS R.S., KALMAN :
                                                                                                                                                                                                                                                                                                                  STRAIN-D/UW-3/CX;
                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                            BACTERIA;
                                                                                                                                                                                                                                                                                                                                                                                              CHLAMYDIA TRACHOMATIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CXC CHEMOKINE
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                                                                       SUBMITTED (MAY-1998) TO EMBL/GENBANK/DDBJ DATA BANKS
                                                                                           DAVIS R.W.;
                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                            DAVIS R.W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE;
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23
109 AA;
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                                    G3329297;
AA; 12016
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54.5%;
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 61.9%;
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                                                                                                                                                                                                                                                                             LAMMEL C., TATUSOV
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8, LAST ANNOTATION UPDATE)
LARGE CHAIN.
                                      MW;
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Pred. No.
1; Misma
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 Score
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                                      781C1449 CRC32;
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 60;
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                                                                                                                                                                                                                                                                             7 R.L.,
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 В
                                                                                                                              FAN J.,
                                                                                                                                                                                                                                                                                               FAN
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Length 1053;
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                                                                                                            MARATHE R.,
Q., KOONIN E
                                                                                                                                                                                                                                                                               MARATHE R., ARAVIND
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X
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                                                                                                                               ARAVIND L.,
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BONFIELD J.,

GREEN P.,

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Best Local
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Matches 6; Conservative
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Best Local :
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01-AUG-1998 (TREMBLREL. 07, C
01-AUG-1998 (TREMBLREL. 07, I
01-AUG-1998 (TREMBLREL. 07, I
SERINE RICH PROTEIN HOMOLOG (
PLASMODIUM VIVAX.
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093290;
01-FEB-1997
01-JAN-1998
01-NOV-1998
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Q68409;
Q1-NOV-1996;
Q1-NOV-1996;
Q1-NOV-1998;
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  HYPOTHETICAL C27D8.3.
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J. VIROL. 70:78-83(1996).
EMBL: 03332: G1167943;
SEQUENCE 200
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SUBMITTED (MAR-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
STRAIN-SALVADOR I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA; ALVEOLATA;
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                                                                                                                                                                                                                                                                                                                                              158 CPAPKENWI 166
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Similarity 55.6%;
5; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         58070 MW;
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                                C27D8
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                                                     02, CREATED)
05, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
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LAST SEQ
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                                                                                                                                                                                                                                                                                                                                                                                                                            Score 58;
Pred. No.
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Pred. No.
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. No. 2.83e+00;
Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , SPAETE R.R.;
19 genes not
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Best Local S
Matches
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083516;
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01-NOV-1998
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                                                                                                           SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

FRASER C.M., NORRIS S.J., WEINSTOCK G.M., WHITE O., SUTTON G.G.,

FRASER C.M., NORRIS E.K., CLAYTON R., KETCHUM K.A.,

DODSON R., GRINN M., MCLEOD M.P., SALZBERG S., PETERSON J.,

SODERGREN E., HARDHAM J.M., MCLEOD M.P., CHIDAMBARAM M., UTTERBACK T.,

KHALAK H., RICHARDSON D., HOWELL J.K., CHIDAMBARAM M., UTTERBACK T.,

KHALAK H., RICHARDSON D., HOWELL J.K., CHIDAMBARAM M., UTTERBACK T.,

MCDONALD L., ARTIACH P., BOWMAN C., COTTON M.D., FUJII C., GARLAND S.

HATCH B., HORST K., ROBERTS K., WATTHEY L., WEIDMAN J., SMITH H.O.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FRASER C.M., NORRIS S.J., WEINSTOCK G.M., WHITE O., SUTTON G.G., DODSON R., GWINN M., HICKEY E.K., CLAYTON R., KETCHUM K.A., SODERGREN E., HARDHAM J.M., MCLEOD M.P., SALIZBERG S., PETERSON J., SODERGREN E., RICHARDSON D., HOWELL J.K., CHIDAMBARAM M., UTTERBACK T., MCDONALD L., ARTIACH P., BOWMAN C., COTTON M.D., FUJII C., GARLAND S. HATCH B., HORST K., ROBERTS K., WATTHEY L., WEIDMAN J., SMITH H.O.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WILSON R., AINSCOUGH R., ANDERSON K., BAYNES C., BERKS M., BONFIELD, BURTON J., CONNELL M., CORSEY T., COOPER J., COOLSON A., CRAXTON M., DEAR S., DU Z., DURBIN R., FAVELLO A., FULTON L., GARDNER A., GREEN HAWKINS T., HILLIER L., JIER M., JOHNSTON L., JONES M., KERSHAW J., KIRSTEN J., LAISTER N., LATREILLE P., LIGHTNING J., LLOYD C., KIRSTEN J., HAISTER N., C'CALLAGHAN M., PARSONS J., PERCY C., MCMUTRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C., RIFKEN L., ROOPEA A., SAUNDERS D., SHOWNKEEN R., SMALDON N., SMITH A SONNHAMMER E., STADEN R., SULSTON J., THIERRY-MIEG J., THOMAS K., WATERSTON R., WATERSTON A., WEINSTOCK L., MILLINGON A., VAUGHAN K., WATERSTON R., WATERON A., WEINSTOCK L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EUKARYOTA; METAZOA; NEMATODA; SECERNENTEA; RHABDITIA; RHABDITIDA; RHABDITINA; RHABDITOIDEA; RHABDITIDAE; PELODERINAE; CAENORHABDITIS.
                                                                             SUBMITTED (MAR-1998) TO EMBL/GENBANK/DDBJ DATA EMBL; AE001226; G3322795; -.
                                                                                                                                                                                                                                                                                                                                                                                                                               Spirochete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TREPONEMA PALLIDUM
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EMBL; 280214; E347995;
HYPOTHETICAL PROTEIN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A. MEDLINE; 94150718.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAENORHABDITIS ELEGANS.
                          SEQUENCE
                                                  HYPOTHETICAL PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                       SCIENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VENTER J.C.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Complete Genome Sequence of Treponema pallidum, the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  188 VCPEAKOWWTQ 198
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                                                                                                                                                                                                                                                                                                                                                                                                 281:375-388(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                59.8%;
Similarity 45.5%;
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8 (TREMBLREL. 08, 1
AL 21.4 KD PROTEIN.
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Best Local s
Matches
....oHAN K.
....oN-SPROAT J., WC
...2 Mb of contiguous n
elegans.";
NATURE 368:37-^-
[2]
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                                                                                                                                                                                                                                                                                 STRAIN-BRISTOL N2;

MEDLINE; 94150718.

WILSON R., AINSCOUGH R., ANDERSON K., BAYNES C., BERKS M., BONFIELD NILSON R., AINSCOUGH R., COPER J., COULSON A., CRAXTON M., BURTON J., CONNELL M., COPSEY T., COOPER J., COULSON A., CRAXTON M., DEAR S., DU Z., DURBIN R., FAVELLO A., FULTON L., GARDNER A., GREEN HAWKINS T., HILLER L., JIER M., JOHNSTON L., JONES M., KERSHAW J., KIRSTEN J., LAISTER N., LATREILLE P., LIGHTNING J., LLOYD C., KCMMINON A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,

MCMURRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,

MCMURRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,

MCMURRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,

MCMURRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,

MCMURRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,

MCMURRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,

MCMURRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,

MCMURRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,

MCMURRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,

MCMURRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,
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PENG Q., ZENG M., BHUIYAN Z.A.,
SHIRAZI Y.; A Characterization
                                                                                                                                    RIFKEN L., ROOPRA A., SAUNDERS D., SHOWNKED R., SMALDON N., SMITH A., SOUNHAMMER E., STADEN R., SULSTON J., THIERRY MIEG J., THOMAS K., VAUDIN M., VAUGHAN K., WATERSTON R., WATSON A., WEINSTOCK L., WILKINSON-SPROAT J., WOHLDMAN P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WITH MDV.";
VIROLOGY 213:590-599(1995).
EMBL; U34966; G1185444; -.
PFAM; PF00048; i18; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EUKARYOTA; METAZOA; NEMATORIA; RHABDITINA; RHABDITOIDEA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAENORHABDITIS ELEGANS.
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01-MAY-1997 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
CODED FOR BY C. ELEGANS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-NOV-1996 (TREMBLREL. 0
01-NOV-1996 (TREMBLREL. 0
01-NOV-1998 (TREMBLREL. 0
ECO Q PROTEIN (FRAGMENT).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7 Match 58.8%; Local Similarity 45.5%; es 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31 CTQPRVQKWVQ 41
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Similarity 54.5%;
6; Conservative
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VARICELLOVIRUS.
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08, LAST ANNOTATION UPDATE)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DDA; SECERNENTEA; RHABDITIA; RHABDITIDA; RHABDITIDAE; PELODERINAE; CAENORHABDITIS.
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Pred. No. 4
2; Mismat
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Pred. No.
4; Misma
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Q2, and BamHI-L fragments of the MDV
s transformed and persistently infect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  UBUKATA
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. 4.36e+00;
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4.36e+00;
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                                                                                                                     chromosome III of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BONFIELD J.,
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Best Local S
Matches
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Best Local Similarity 41.7%;
Matches 5; Conservative
                                                                                                                                                                                                                                                                C.L., ETCKSON H.P.;
SUBMITTED (AUG-1996) TO EMBL/GENBANK/DDBJ DATA
EMBL; U65939; G1518098; -.
NON_TER 1 1
SEQUENCE 95 AA. ...
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STRAIN-BRISTOL N2;
WATERSTON R.;
SUBMITTED (FEB-1997) TO EN
EMBL; U88173; G1825643; -
SEQUENCE 1224 AA; 1397;
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P70808;
P70808;
01-FEB-1997
01-FEB-1997
01-AUG-1998
ATP BINDING
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SUBMITTED (FEB-1997) T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AZOTOBACTER VINELANDII.
BACTERIA; PROTEOBACTERIA;
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(TREMBLREL.
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33.3%;
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                      07:42:34 1999
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Pred. No. 4.36e+
3; Mismatches
                                                                                                                                                                                 Score 56;
Pred. No.
4; Misma
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                                                                                                                                                                                      Mismatches
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4.36e+00;
                                                                                                                                                                                                               6.70e+00;
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1 91 90.1 99 2 R06398 Human MCF precursor. 1.87e-02 2 88 87.1 66 24 W13599 Monocyte chemoattract 3.92e-02 3 88 87.1 67 24 W13599 Monocyte chemoattract 3.92e-02 4 88 87.1 68 24 W13597 Monocyte chemoattract 3.92e-02 5 88 87.1 69 14 R87678 Monocyte chemoattract 3.92e-02 6 88 87.1 69 14 W13596 Monocyte chemoattract 3.92e-02 7 88 87.1 76 10 P0292 Monocyte chemoattract 3.92e-02 9 88 87.1 76 14 R87675 (28-Asp) MCP-1. 3.92e-02 11 88 87.1 76 14 R87676 (24-Asp) MCP-1. 3.92e-02 12 88 87.1 76 14 R87676 MCP-1. 3.92e-02 13 88 87.1 76 14 R87676 MCP-1. 3.92e-02 14 88 87.1 76 14 R87677 (3-Ala) MCP-1. 3.92e-02 15 88 87.1 76 15 R87680 MCP-1. 3.92e-02 16 88 87.1 76 15 R87680 MCP-1. 3.92e-02 17 88 87.1 76 15 R87680 MCP-1. 3.92e-02 18 87.1 76 15 R87680 MCP-1. 3.92e-02 19 88 87.1 79 15 R86859 Mature MCP-1. 3.92e-02	Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.  SUMMARIES  Result Query No. Score Match Length DB ID Description Pred. No.	Database: a-geneseq32 1:part1 2:part2 3:part3 4:part4 5:part5 6:part6 7:part7 8:part8 9:part9 10:part10 11:part11 12:part12 13:part13 14:part14 15:part15 16:part16 17:part17 18:part18 19:part19 20:part20 21:part21 22:part22 23:part23 24:part24 25:part25 26:part26 27:part27 28:part28 29:part29 Statistics: Mean 18.874; Variance 63.668; scale 0.296	tion: (1-12) f Score: 101 e: 1 EICLDF table: PAM 150 Gap 15 d: 131922 s occessing: Minimum Listing	Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd MPsrch_pp protein - protein database search, using Smith-Waterman algorithm Run on: Thu Apr 1 07:46:02 1999; MasPar time 2.83 Seconds Tabular output not generated.	(TM)
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Thuman monocyte chemotactic factor type polypeptide and DNA encoding it - useful as antibacterial and antitumour agents. The sequence useful as antibacterial and antitumour agents. S Claim 2; Page 25; 27pp; English.

The sequence was deduced from the DNA sequence determined from the sequence recombinant plasmids, pHMCF7, pHMCF25 and pHMCF29 which were isolated from a cDNA library prepd. from RNA extracted from thuman promyelocytic leukaemia cell line, HL-60 (ATCC CCL-240).

C human promyelocytic leukaemia cell line, HL-60 (ATCC CCL-240).

C vectors. In plasmids pHMCF7 and pHMCF29 bases 105 and 226 were T and G resp; in pHMCF25 they were C and A resp. The AA at posn.

C 76 of the precursor protein is therefore not determined and may be ceither Ala or Thr. The protein may be produced by recombinant C DNA techniques in E.coli, and is useful as a drug for treatment of C certain bacterial infectons and cancers.
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lung disease.
Homo sapiens.
CA2152141 A.
20-DEC-1996.
19-JUN-1995; 152141.
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W13598
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02-JAN-1990; U000004.
01-JAN-1989; JP-000065.
03-FEB-1989; JP-026438.
(USDC ) US SEC OF COMMERCE.
FURULTAILY, FUKUI T, JUNICHI Y, Masaaki Y, Matsushima
                                                                                                             Monocyte chemoattractant protein analogue MCP-1 (10-76). Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; chronic inflammatory disease; arthritis; arteriosclerosis;
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07-NOV-1997 (first entry)
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R06398 standard; protein; 99
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llarity 83.3%;
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/note="Claim 1"
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Pred. No. 1.87e-02;
1; Mismatches 1
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Chemoattractant MCP-2
Chimeric interleukin-
Human MC proprotein.
Human beta-chemokine
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St Disclosure; Page 5; 27pp; English.

The present sequence represents an analogue, MCP-1 (11-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the Chemoattractant protein-1 (MCP-1). The analogue, which lacks the Chemoattractant protein-1 (MCP-1). The analogue, which lacks the CP-1 of MCP-1 acts as an antagonist of MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 creceptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into CC inflammation sites. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung CC diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably CC providing 50% inhibition of binding at a 25:1 ratio or less, compared
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PT N-terminally truncated monocyte chemo:attractant protein-1 (MCP-1) - PT lacks MCP-1 activity and inhibits receptor binding, useful as anti-inflammatory agent protein-1 (MCP-1) - PT anti-inflammatory agent placks MCP-1 (10-76), of monocyte CF chemoattractant protein-1 (MCP-1). The analogue, MCP-1 (10-76), of monocyte CF chemoattractant protein-1 (MCP-1). The analogue, which lacks the CF chemoattractant protein-1 (MCP-1). The analogue, which lacks the CF chemoattractant protein-1 (MCP-1), acts as an antagonist of MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 creceptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into cinflammation sites. MCP-1 has been implicated in allergic and chronic inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding CF receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared with 75:1 for prior art mutant 7ND.
Query Match
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Matches 10; Consei
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W13599;
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CA2152141-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Monocyte chemoattractant protein analogue MCP-1 (11-76). Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; allergy; chronic inflammatory disease; arthritis; arteriosclerosis;
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19-JUN-1995; 152141.
19-JUN-1995; CA-152141.
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Similarity 83.3%;
10; Conservative
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Mismatches 1;
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No. 3.92e-02;
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CC The present sequence represents an analogue, MCP-1 (9-76), of monocyte chemoattractant protein-1 (MCP-1). The analogue, which lacks the CC N-terminal amino acids 1-8 of MCP-1, acts as an antagonist of MCP-1 as it lacks MCP-1 biological activity and inhibits binding to a MCP-1 creceptor. The analogue is useful as an anti-inflammatory agent to block the effects of MCP-1 which is an inflammatory mediator causing migration of monocytes and other cells e.g. basophils and lymphocytes into inflammatory diseases e.g. arthritis, arteriosclerosis and several lung diseases. The analogue competes more effectively with MCP-1 for binding MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably providing 50% inhibition of binding at a 25:1 ratio or less, compared Sc Sequence 68 AA;
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disulfide_bond 5..45
W09513295-A1.
18-MAY-1995.
07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER II
ROLLINS B, Zhang YJ;
WPI; 95-215051/28.
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R87678 standard; protein; 69
R87678;
21-FEB-1996 (first entry)
Human monocyte chemo-attractant protein-1 (MCP-1) derivs. capable of inhibiting the monocyte chemo-attractant activ endogenous MCP-1 and can be used to treat restenosis
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19-JUN-1995; CA-152141.
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4..29
5..45
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                                                                                                                                                                                                                                                                                                                               /note= "amino acids 2-8 of the native protein have
been deleted between these residues"
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83.3%;
e monocyte chemo-attractant activity be used to treat restenosis
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                                                                                                                                                                                                                                                           PT anti-inflammatory agent
PS Claim 5; Page 5; 27pp; English.
PS Claim 5; Page 5; 27pp; English.
CC The present sequence represents an analogue, MCP-1 (8-76), of monocyte
CC Chemoattractant protein-1 (MCP-1). The analogue, which lacks the
CC N-terminal amino acids 1-7 of MCP-1, acts as an antagonist of MCP-1
CC as it lacks MCP-1 biological activity and inhibits binding to a MCP-1
CC receptor. The analogue is useful as an anti-inflammatory agent to block
CC the effects of MCP-1 which is an inflammatory mediator causing migration
CC of monocytes and other cells e.g. basophils and lymphocytes into
CC inflammation sites. MCP-1 has been implicated in allergic and chronic
CC inflammatory diseases e.g. arthritis, arteriosclerosis and several lung
CC diseases. The analogue competes more effectively with MCP-1 for binding
CC MCP-1 receptors than prior art mutant versions of MCP-1 e.g. preferably
CC providing 50% inhibition of binding at a 25:1 ratio or less, compared
CC with 75:1 for prior art mutant 7ND.
Sequence 69 AA;
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CA2152141-A.
20-DEC-1996.
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The peptides can be used to prevent restenosis, e.g. in patients
            W09374 standard; Protein; W09374; 21-MAR-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Monocyte chemoattractant protein analogue MCP-1 (8-76). Truncated monocyte chemoattractant protein-1; inhibitor; receptor binding; anti inflammatory; basophil; lymphocyte; chronic inflammatory disease; arthritis; arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-terminally truncated monocyte chemo:attractant protein-lacks MCP-l activity and inhibits receptor binding, useful
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07-NOV-1997
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19-JUN-1995;
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Similarity 83.3%;
10; Conservative
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llarity 83.3%;
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CA-152141.
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d. No. 3.92e-02;
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31-JAN-1989; 030423.
31-JAN-1989; US-304234.
(USSH) US Dept. of Health and Higher the state of t
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22-OCT-1992; 965678.
22-OCT-1992; US-965678.
27-OCT-1994; US-250958.
27-MAY-1994; US-250958.
(UNMI) UNIV MICHIGAN.
Kunkel SL, Lyle LR, St.
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Disclosure; Column 13-14; 16pp; English.

This is the amino acid sequence of the human monocyte chemoattractant protein (MCP)-1, a member of the C-C chemokine family. MCP-1 is a potent stimulator of monocyte chemotaxis and is produced by injured vascular smooth cells thus attracting monocytes and macrophages which infiltrate the injured area and release growth factor. This causes proliferation of the vascular smooth cells resulting in restenosis. The gene sequence can be used to generate antisense sequences e.g. T48093-7, which can be used to inhibit in vitro MCP-1 prodn. by mononuclear cells e.g. lymphocytes or macrophages, or smooth muscle cells, esp. in order to prevent vascular restenosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-JAN-1990 (first entry)
Peptide from human glioma cell line U-105MG
Glioma; leucocyte; chemotaxis; neoplasms.
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                                                                                                                                Sequence
                                                                                                                                                                                                                           Disclosure;
                                                                                                                                                                                                                                                                                           New peptide with specific chemotactic a from glioma or leucocyte cells, useful
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17-JAN-1990
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glioma cell line U-105MG
wt. 8400. Used to treat:
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Best Local :
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Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28 Tyr by Leu and/or 30 Arg by Val. Preferred mutations are: (1) substitution of 28 Tyr by aspartate: (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of anino acids 2.8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R53398
R53398;
                                                                                                                                                                                                                                                                                                                                   Antisense; RNA; DNA; monocyte chemotactic radionuclide; vascular restenosis; alpha; diagnosis; monocytes; vascular injury.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (DAND ) DANA FARBER CANCER ROllins B, Zhang YJ; WPI; 95-215051/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (28-Asp) MCP-1.
monocyte chemoattractant protein; MCP-1; mutant; restenosis;
Anti-sense monocyte chemotactic protein-1 oligo:nucleotide(s) and peptide(s) - is used for inhibiting, treating or imaging areas of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989. The peptides can be used to prevent restenosis, e.g. in patients
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12-NOV-1993; US-152301
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WO9513295-A1.
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Sequence 76 AA;
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llarity 83.3%;
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US-965678.
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12..52
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                                                                                                                                                                                                                                    /note= "Unspecified amino
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Protein;
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Pred. No. 3.
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3.92e-02;
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beta; emitting is
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PT Human monocyte chemo-attractant protein-1 (MCP-1) derivs. - are capable of inhibiting the monocyte chemo-attractant activity of endogenous MCP-1 and can be used to treat restenosis Claim 5; Page 11; 22pp; English.

CX Ctaim 5; Page 12; Page 12; Page 12; Page 12; Page 12; Page 13; Page 13; Page 14; Page 
                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 1
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R28660 standard; Protein; 76
R28660;
24-MAR-1993 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-MAY-1995.
07-NOV-1994; U12874.
12-NOV-1993; US-152301.
(DAND ) DANA FARBER CANCER INST INC ROllins B, Zhang YJ;
WPI; 95-215051/28.
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monocyte chemoattractant protein; MCP-1; mutant; restenosis;
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R87676;
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The sequences given in R53398-99 represent sense and
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Similarity 83.3%;
10; Conservative
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                                                                                                                                                                                                                                                                                                                                                                       88; DB 14;
No. 3.92e-02;
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Claim 6; Page 11; 22pp; English.

C. Monocyte chemoattractant protein-1 (MCP-1) derivatives are mutated such that they inhibit the monocyte chemoattractant activity of endogenous MCP-1, provided that the derivative has not been modified by the substitution of 28-Tyr by Leu and/or 30-Arg by Val. preferred mutations are: (1) substitution of 28-Tyr by asspartate; (2) substitution of 24 Arg by Phe; (3) substitution of 3-Asp by Ala; and/or (4) deletion of amino acids 2-8. The present sequence is a specifically claimed human MCP-1 derivative based on the parent protein disclosed in Rollins, Molecular and Cellular Biology, Vol. 9, No. 11, pp. 4687-4695, Nov. 1989.

The peptides can be used to prevent restenosis, e.g. in patients
                         Query Match
Best Local Similarity
Matches 10; Conser
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RBS; promoter; tryptophan; r
Synthetic.
W09219737-A.
12-NOV-1992.
27-APR-1992; J00550.
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R87677;
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An expression plasmid, pHM483; for producing MCF(76) consisting of 76 amino acids was constructed. The prod. can be used for e.g. treating bacterial infectious diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (DAIN ) DAINIPPON PHARM CO LTD Fukui T, Matsuo N, Yamada M, Yamuri 92-398864/48.
                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                  (DAND ) DANA FARBER C ROLLINS B, Zhang YJ; WPI; 95-215051/28.
                                                                                                                                                                                                                                                                                                                                                               07-NOV-1994;
12-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                       disulfide_bond disulfide_bond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             angioplasty.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         monocyte chemoattractant protein; MCP-1; mutant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E.coli strains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               prodn. of polypeptide(s) having monocyte chemotactic activity
using expression plasmids with E. coli elements and specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             N-PSDB; Q30745-46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-MAY-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Plasmid; monocyte chemotactic factor; MCF; termination; terminator; initiation; ribosc
                                                                                               undergoing
                                                                                                                                                                                                                                                                                                                                                                                              18-MAY-1995.
                                                                                                                                                                                                                                                                                                                                                                                                          W09513295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 modified_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (3-Ala) MCP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-FEB-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           50 eicadpkgkwvq
50 eicadpkqkwvq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 EICLDPKQKWIQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               87.18;
Similarity 83.38;
10; Conservati
                                                                                   coronary artery angioplasty.
76 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            76 AA;
                                                                                                                                                                                                                                                                                                                                                              U12874.
US-152301.
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11..36
12..52
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5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                       87.1%;
83.3%;
                                                                                                                                                                                                                                                                                                                                                CANCER INST INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Asp in the native sequence is replaced by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             repressor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 88;
Pred. No.
                                       Score 88; DB 14;
Pred. No. 3.92e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Yamagishi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ribosome
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         translation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                    Length 76;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            restenosis;
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                         0;
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RESULTANT DE LES ANDES EN LES A
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Best Local S
Matches 1
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25-FEB-1997.
05-OCT-1992; 956862.
05-OCT-1992; US-956863.
05-OCT-1992; US-956862.
29-APR-1994; US-235659.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 W09507710-AI.
23-MAR-1995.
13-SEP-1994; J01512.
13-SEP-1993; JP-227385.
(TORA) TORAY IND INC.
Matsushima K, Naruto M;
WPI; 95-131181/17.
                Radio:labelling neutrophil-activating peptide(s) - for imaging targetted delivery of radioactive agent Example 10; Column 19-20; 15pp; English.

Will31 represents mature human monocyte chemoattractant protein-1 (MCP-1). MCP-1 was radionuclide labelled and used in a method for imaging a target site in vivo in an animal. Labelled MCP-1 was allowed to accumulate at a target site (having MCP-1 receptors) in the animal and detected so as to image the target site. Any Cys-Cys or Cys-Xaa-Cys chemokine carrying either iodine-123 or iodine-131 can be used in the method. Especially preferred is neutrophil activating peptide-2 (NAP-2) which recognises interleukin-8 receptors and is labelled with technetium-99m, indium-111, copper-62, rhenium-186 or rhenium-188.

The method can be used for imaging a site of infortion inflammation inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LT 15
W11131 standard; protein; 76
W11131;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wound treatment using monocyte chemotactic factor - has potent therapeutic effect on skin wounds and ulcers Disclosure; Page 12; 22pp; Japanese.

The invention relates to a new remedy for curing wounds which, instead of comprising a growth factor, comprises a monocyte chemotactic activating factor (MCAF) or its variants or derivatives. The factor has potent effect on skin wounds and ulcers. The present sequence is human MCAF, the activity of which is exemplified as the new remedy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mature human monocyte chemoattractant protein-1 (MCP-1). MCP-1: mature chemoattractant protein-1; cytokine; interleukin-8; IL-8; neutrophil activating peptide; labelling; imaging; targeting; radionuclide; infection; inflammation; neoplasm; atheromatous lesion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R87680 standard; protein;
R87680;
05-MAR-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                         Kunkel SL, Lyle L!
WPI; 97-153541/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Monocyte chemotactic activating monocyte chemotactic activating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MICW ) MALLINCKRODT MEDICAL INC. (UNMI ) UNIV MICHIGAN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_difference
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
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Local Similarity 83.3%;
les 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                50 eicadpkąkwyg 61
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Lyle LR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           76 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Strieter
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 88; DB 15; Le
Pred. No. 3.92e-02;
1; Mismatches 1;
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factor; MCAF; wound remedy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 76;
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Best Local
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Best Local Similarity
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06-APR-1995.
28-SEP-1994;
28-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for this cell type. MCP-1 is produced by injured vascular smooth muscle cells and attracts the monocytes and macrophages which infiltrate the area, releasing growth factors and resulting in proliferation of vascular smooth muscle and restenosis. Nucleic acid molecules which are antisense to the MCP-1 mRNA may be used to inhibit translation of MCP-1 and so may be useful for inhibiting vascular restenosis, partic. following balloon angioplasty or a related process. The molecule may be radiolabelled to increase its therapeutic effect or for imaging areas of potential
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This sequence represents the mature form of monocyte chemotactic protein-1 (MCP-1). MCP-1 is a member of the "C-C" family of chemoattractant cytokines or chemokines. It is a potent stimulator of monocyte chemotaxis and has an extemely high degree of specificity for this cell type. MCP-1 is produced by injured vascular smooth muss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antisense; monocyte chemotactic protein-1; MCP-1; "C-C" family; chemoattractant cytokine; chemokine; stimulation; monocyte; chemotaxis; vascular smooth muscle cell; macrophage; proliferation; restenosis; balloon angioplasty.
                                                                                                                                                              Human monocyte chemoattractant factor hMCP-1; chemokine; vaccine; Human monocyte chemoattractant factor; hMCP-1; chemokine; vaccine; meningitis related homologous antigenic sequence; MRHAS; RV-1; immunoassay; diagnosis; treatment; prophylactic; bacterial;
                                                                                                             Homo sapiens
                                                                                                                                          viral
                                                                                                                                                                                                                                                                           R73914;
05-DEC-1995 (first entry)
                                                                                                                                                                                                                                                                                                                            R73914 standard; protein; 99
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Disclosure; Page 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New anti:sense oligo:nucleotide(s) restenosis - are directed against monocyte chemotactic protein, opt.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N-PSDB; T03528.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lyle LR, Thomas-M WPI; 95-263703/34.
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WO9519167-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mature MCP-
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R86859 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                W09509232-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MLCW ) MALLINCKRODT MEDICAL INC Lyle LR, Thomas-Miller B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-JAN-1995; U00605.
14-JAN-1994; US-182917.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-MAR-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               51 eicadpkqkwvq
||| ||||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      50 eicadpkqkwvq
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    77 AA;
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ilarity 83.3%;
Conservative
  CA0516.
US-127499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       87.1%;
83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 88; DB 15;
Pred. No. 3.92e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred.
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No. 3.92e-02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and peptide(s) for inhibiting C-C family cytokine(s) such a radio: labelled for therapy or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 77;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 76;
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The peptide(s) corresp. to homologous antigenic proventing meningitis on bacterial and viral agents and on chemokine(s), used for proventing meningitis.

Proventing and preventing meningitis.

CR 73914 is the chemokine Human monocyte chemoattractant factor hMCP-1.

CR 73914 is the meningitis related antigenic sequences (MRHAS) claimed in R73895 and R73907, which are recognised by a monoclonal antibody from the hybridoma Rubella virus (RV)-1. The claimed MRHAS peptides cand/or viral meningitis agents in a sample, or in prophylactic and cherapeutic meningitis treatments. The peptides may also be used as vaccines against meningitis.

CR NB: Identified by matching corresponding MRHAS peptides.
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Best Local Similarity
Matches 10; Conser
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26-JUL-1994; U08207.
29-JUL-1993; US-099866.
13-OCT-1993; US-136117.
(UPJO) UPJOHN CO.
HOOGWORT AJ, Ledbetter S
WPI; 95-082239/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Screening for cpds. with anti-heparanase activity - by detecting inhibition of heparin or heparan sulphate degradation, cotentially useful for treating arthritis, restenosis, cancer. Purified heparanases, prepared under reducing conditions and activated with transglutaminase, are given in R70786-804. Most are prepared by reverse transcription of mRNA from activated human leukocytes, then cloning of the cDNA into pVL1392 baculovirus vector, and expression in Sf9 cells in the presence of reduced sylutathione and dithiothreitol.

Sequence 99 AA;
25-JUL-1989 (first entry)
Human monocyte chemo-attractant peptide-1.
Human monocyte chemo-attractant peptide; inflammatory disease; neoplasms
                                                                                              17 19
P95387 standard; protein; 99 AA.
P95387;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9504158-A.
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MCP-1; chemoattractant; heparanase; heparin; heparan sulfate; arthritis; restenosis; cancer; wound healing.
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N-PSDB; Q85370.
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(VALS/) VAN ALSTYNE
Sharma LR, Van Alst
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Local Similarity 83.38;
hes 10; Conservative
                                                                                                                                                                                                                                                                              73 eicadpkqkwvq 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         73 eicadpkqkwvq 84
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larity 83.3%;
Conservative
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Pred. No. 1; Mismai
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Pred. No. 3.92e-02;
1; Mismatches 1
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Best Local Similarity 83.3%;
Matches 10; Conservative
                                                                                                                                                                                                          N-PSDB; Q30748.

Prodn. of polypeptide(s) having monocyte chemotactic activity using expression plasmids with E. coll elements and specific E.coll strains

Disclosure; Page 43-44; 56pp; English.

An expression plasmid, pHMC076 for producing MCF(76) consisting of 76 amino acids was constructed. DIMA encoding MCF(76) was prepd. using a recombinant plasmid pHMCF7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human derived monocyte chemo-attractant peptide prods. - obtd. from human glioma cell line U-105MG or peripheral blood mononuclear leukocytes. Disclosure; fig 2; 66pp; English.

This is a human-derived monoyte chemo-attractant peptide (MCP-1) sequence MCP-1 exhibits optimal chemotactic activity at a concn. of lnM and has a mol. mass of c.a. 8,400 D. MCP-1 can be used for treating infection eg inflammatory disease, or for the control of neoplasms by accumulation of monocytes at the site of the infection. The corresp. DNA is obtd. by chemical synthesis, by screening reverse trascripts of mRNA from purified blood leukocytes or cell cultures of eg U-373 MG or KMG-5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         (DAIN ) DAINIPPON PHARM CO LTD.
Fukui T, Matsuo N, Yamada M, Yamagishi J;
WPI; 92-398864/48.
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27-APR-1992; J00550.
09-MAY-1991; JP-135950.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-MAR-1989; US-330446.
(USSH) US Dept. Health and Human.
Yoshimura T, Robinson EA, Appella E, Leonard
WPI; 89-300683/41.
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30-MAR-1989;
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                                               eicadpkqkwvq 84
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10; Conse
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                                                                                                          Conservative
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24..99
/label= mat_protein
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/product-MCP-1
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                                                                                                                              87.1%;
83.3%;
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Pred. No. 3.92e-02;
                                                                                                          Mismatches
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                                              PT spontaneous rearrangement of intermediate prod.

Example 3; Page 47; 61pp; English.

C The present peptide, which has an amino-terminal cysteine residue, was used in a novel synthesis method, comprising the ligation of a cc 1st oligopeptide (OP) to a 2nd OP, end to end, to produce an OP conduct. This comprises mixing the 1st and 2nd OP (which have a cc carboxy-terminal thioester and an amino-terminal Cys with an cc unoxidised SH side chain) in a solution containing a catalytic cc thiol, condensing the terminal groups to form an intermediate OP, cc in which components are linked by a beta-aminothioester bond and cc rearranging the bond to give a production of full length proteins, cc which can be made into native, disulphide containing proteins by crefolding and oxidisation. The method also combines chemoselective, cc unprotected, peptide reactions, with native peptide bond formation, cn...there.
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Best Local
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04-MAY-1995; U05668.

04-MAY-1995; W0-U05668.

(SCRI) SCRIPPS RES INST.

Dawson PE, Kent SBH, Mui

WPI; 96-506095/50.
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Synthetic.
US5079228-A.
07-JAN-1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAF(44-72) is a preferred peptide derived from NAF which is antagonistic to NAF and has no chemotactic activity. It inhibited NAF-induced migration by 34 per cent. When used with a second preferred peptide, i.e. NAF(3-25) (see R20236) inhibition was 70 per cent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthesis of protein by chemical ligation of unprotected peptide(s) by reaction of N-terminal Cys with C-terminal thioester and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Interleukin-8(34-72) used in novel synthesis method. Thioester; synthesis; ligation; catalysis; thiol; condensation; link; beta-aminothioester; bond; amide; production; disulphide; refolding; oxidisation; interleukin 8; IL-8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New peptide inhibitors of neutrophil activating factor - which inhibit chemotaxis, for treating adult respiratory distress syndrome and other inflammatory lesions caused by NAF Claim 8; Column 9; 11pp; English.
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05-FEB-1990; 475658
05-FEB-1990; US-475
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   Sequence
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(TEXA ) UNIV OF TEXAS S
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      39
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larity 66.7%;
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. No. 1.05e-01;
Mismatches 0;
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Query Match Best Local Similarity

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Score Pred.

84;

DB 22; 1.05e-01;

Length

Query Match

28;

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84; DB 7;

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RESULTANT RESULT
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                                for treatment of Initalian (III-8) concluded by Page 29; 47pp; English.
Claim 19; Page 29; 47pp; English.
The sequence is that of an analogue of interleukin-8 (II-8) confirmentation of the competitive antagonist of II-8, i.e. it can be used to treat inflammation, e.g. by intravenous injection or oral admin. It inflammation, e.g. by intravenous injection or oral admin. It
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-JUN-1993.
03-DEC-1992;
04-DEC-1991;
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WPI; 93-196997/24.

New Interleukin-8 analogues modified in specified region - used as neutrophil activators or for blocking effect of IL-8 on neutrophil(s) for treatment of inflammation.

Claim 23; Page 30; 47pp; English.

The sequence is that of an analogue of interleukin-8 (IL-8) comprising IL-8 residues 3-69. It is able to bind neutrophils and act as a competitive antagonist of IL-8, i.e. it can be used to treat inflammation, e.g. by intravenous injection or oral admin. It can act as a neutrophil activator and so can be used to stimulate an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Modified human interleukin-8 analogue (6-72).

Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; II-8; inflammation; treatment; chemotax activity; stimulation; inflammatory response
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                                                                                                                                                                                                                                                                                                         04-DEC-1991; US-801578.
(BIOM:) BIOMEDICAL RES CENT LTD.
(BIOM:) BIOMEDICAL RES CENT LTD.
(Clark-Lewis I, Moser B;
WPI; 93-196997/24.

WPI; 93-196997/24.

New interleukin-8 analogues modified in specified region - used as neutrophil activators or for blocking effect of IL-8 on neutrophil(s) for treatment of inflammation.
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03-DEC-1992; CA0528.
04-DEC-1991; US-801578.
(BIOM-) BIOMEDICAL RES
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W09311159-A.
act as a neutrophil activator inflammatory response. Sequence 67 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
WO9311159-A.
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Local Similarity 66.7%;
Les 8; Conservative
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. No. 1.05e-01;
Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                        10-JUN-1993.
03-DEC-1992;
04-DEC-1991;
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Claim 17; Page 29; 47pp; English.
The sequence is that of an analogue of interleukin-8 (IL-8) compri
IL-8 residues 5-72. It is able to bind neutrophils and act as a
competitive antagonist of IL-8, i.e. it can be used to treat
inflammation, e.g. by intravenous injection or oral admin. It can
act as a neutrophil activator and so can be used to stimulate an
inflammatory response. It also has strong chemotaxis activity and
can be used to attract neutrophils to a diseased area.
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10-JUN-1993.
03-DEC-1992; CA0528.
04-DEC-1991; US-801578.
                             New interleukin-8 analogues modified in specified region neutrophil activators or for blocking effect of IL-8 on neu for treatment of inflammation Claim 15; Page 29; 47pp; English.

The sequence is that of an analogue of interleukin-8 (IL-8) IL-8 residues IL-5 (6-72). It is able to bind neutrophils a as a competitive antagonist of IL-8, i.e. it can be used to
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Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; IL-8; inflammation; treatment; chemotaxis;
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                                                                                                                                                                                                                                                                             Clark-Lewis I, Moser B;
WPI; 93-196997/24.
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(BIOM-) BIOMEDICAL RES CENT
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R38083;
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10-JUN-1993: CA0528.
03-DEC-1991; US-801578.
04-DEC-1991; US-801578.
(BIOM-) BIOMEDICAL RES CENT LTD.
Clark-Lewis I, Moser B;
WPI; 93-196997/24.
New interleukin-8 analogues modified in specified region - used as neutrophil activators or for blocking effect of IL-8 on neutrophil for treatment of inflammation
Claim 9; Page 29; 47pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     for treatment of inflammation Claim 16; Page 29; 47pp; English.
The sequence is that of an analogue of interleukin-8 (IL-8) IL-8 residues Gln5 (6-72). It is able to bind neutrophils an as a competitive antagonist of IL-8, i.e. it can be used to inflammation, e.g. by intravenous injection or oral admin. I act as a neutrophil activator and so can be used to stimulat
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Analogues; modified; neutrophil activators; antagonists; competitive antagonist; II-8; inflammation; treatment; cl
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New interleukin-8 analogues modified in specified region - used as neutrophil activators or for blocking effect of IL-8 on neutrophil(s)
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R38082;
Homo sapiens.
W09731098-A1.
28-AUG-1997.
                                                                                                                       19-MAR-1998 (first entry)

Drol3+ chemokine beta10 or monocyte chemotactic protein 4 variant. Human; chemokine beta10; Ck beta10; treatment; antagonist; solid tumour; infection; autoimmune disease; asthma; antibody; fibrotic disease; psoriasis; neurodegenerative disease; wound healing; haematopoiesis regulation; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          act as a neuropinflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New interleukin-8 analogues modified in specified region - used as neutrophil activators or for blocking effect of IL-8 on neutrophil(s) for treatment of inflammation claim 10; Page 29; 47pp; English.

The sequence is that of an analogue of interleukin-8 (IL-8) comprising IL-8 residues Ala4Ala5 (6-72). It is able to bind neutrophils and act as a competitive antagonist of IL-8, i.e. it can be used to treat inflammation, e.g. by intravenous injection or oral admin. It can act as a neutrophil activator and so can be used to stimulate an inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Modified human interleukin-8 analogue Ala4Alao (0-/2).
Analogues; modified; neutrophil activators; antagonists; human; competitive antagonist; IL-8; inflammation; treatment; chemotaxis; activity; stimulation; inflammatory response.
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                                                                                                                                                                                                                                                                                                                   W22675 standard; Protein; W22675;
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03-DEC-1992; CA0528.
04-DEC-1991; US-801578.
                                                                                   chromosome identification; monocyte chemotactic protein
leukaemia; MCP-4; Drol3+ variant.
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Example 11; Fig 5; 83pp; English.

Example 11; Fig 5; 83pp; English.

The present sequence is human chemokine beta10 (Ck beta10) or monocyte chemotactic protein 4 (MCP-4) Drol3+ variant, which can be used to treat patients deficient in Ck beta10, while a Ck beta10 can be used to reduce excessive levels of Ck beta10. Ck beta10 can be used to treat leukaemia, solid tumours, chronic or opportunistic infections, autoimmune diseases, asthma, fibrotic diseases, psoriasis and neurodegenerative diseases. It also promotes wound healing, regulates haematopoissis and generates antibodies. Labelled Ck beta10 can be used to identify its cognate receptor, while cells expressing the receptor can be used to screen compounds for (ant)agonist activity. The antagonist can be used to treat rheumatoid arthritis, autoimmune, chronic inflammatory or infectious diseases, allergies, prostaglandin dependent fever and bone marrow failure, silicosis, sarcoidosis, hyper-eosinophilic syndrome, lung inflammation and atherosclerosis. Ck beta10 cDNA can be used to isolate genes encoding similar peptides, in gene therapy
                                                                                       Query Match
Best Local S
                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (HUMA-) HUMAN GENOME SCI INC.
Adams M, Alderson R, Applebaum
Parmelee D, White J;
WPI: 97-435153/40.
                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Polypeptide encoding chemokine beta protein 4 - useful to treat tumours,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-FEB-1996; U02598.
23-FEB-1996; WO-U02598.
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eicadpkekwvq 56
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Search completed: Thu Apr 1 07:46:32 1999 Job time: 30 secs.

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Release 3.1A John F. Collins, Biocomputing Research Unit. Copyright (c) 1993-1998 University of Edinburgh, U.K. Distribution rights by Oxford Molecular Ltd

MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Tabular output not generated. Run on: Thu Apr 1 07:45:27 1999; MasPar time 3.43 Seconds 131.151 Million cell updates/sec

Description: Perfect Score: Sequence: Title: >US-08-927-939-14 (1-12) from US08927939.pep 101 1 EICLDPKQKWIQ 12

Scoring table: PAM 150 Gap 15

Searched:

116738 seqs, 37463448 residues

Post-processing: Minimum Match 0% Listing first 100 summaries

Database: pir58 1:pir1 2:pir2 3:pir3 4:pir4

Statistics: Mean 25.334; Variance 37.630; scale 0.673

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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Cloning of a canine gene homologous
interleukin-8-encoding gene.
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Cordler, G.
submitted to the EMBL Data Library, March 1994
Nucleotide sequence of ovine interleukin 8 cDNA using
polymerase chain reaction.
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#superfamily beta-thromboglobulin
#length 95 #molecular-weight 10611
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06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change
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interleukin-8 - dog
formal_name Canis lupus familiaris #common_name dog
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#journal Immunol. Cell Biol. (1994) 72:398-405
#title Cloning, sequencing, expression and inflammatory activity
#title skin of ovine interleukin-8.
#cross-references MTID:95137691
                                                      #authors
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##cross-references GB:M86923; NID:g164520; PID:g164521
##CICATION #superfamily beta-thromboglobulin
#Nolecular-weight 11633 #checksum
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interlaukin 8 precursor - pig
#formal_name Sus scrofa domestica #common_name domestic
02-Jun-1995 #sequence_revision 02-Jun-1995 #text_change
08-Sep-1997
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alveolar macrophage chemotactic factor-I (AMCF-I)
interleukin-8 homolog - pig
#formal_name Sus scrofa domestica #common_name domestic
30-Apr-1993 #sequence_revision 18-Nov-1994 #text_change
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J. Biol. Chem. (1944) 269:17-85
Regulation of interleukin-8 expression in porcine alveolar macrophages by bacterial lipopolysaccharide.
Kuijper, J.L.; Forstrom, J.W.; M. Biochemistry (1992) 31:10483-10490 Molecular cloning of porcine alveo
                                 Goodman, R.B.; Foster, D.C.; Mathewes, S Kuliper, J.L.; Forstrom, J.W.; Martin,
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formal_name Ovis sp. #common_name sheep
21-Feb-1997 #sequence_revision 21-Feb-1997 #text_change
09-May-1997
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Pred. No.
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Pred. No. 2.88e-07;
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Best Local Similarity 75.08;
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**title Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and their expression in spleen cells.

**cross-references MUID:91225489
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#accession S13052
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                                                                                                                                                                                                                                                                                                         ##molecule_type protein
##residues 23-33,'X',35,'X',37-46,'X',48-49,'I',51-53 ##label BEA
#FICATION #superfamily beta-thromboglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ##residues 1-101 ##label YOS ##cross-references GB:M57439; NID:g165552; PID:g165553
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##residues 1-103 ##label GOO
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Biochem. J. (1990) 271:797-801
A novel neutrophil chemoattractant generated during an inflammatory reaction in the rabbit peritoneal cavity in vivo. Purification, partial amino acid sequence and structural relationship to interleukin 8.
A60299 #type complete
monocyte chemoattractant protein 1 precursor - human
GDCF-1; glioma-derived monocyte chemotactic factor 1; MCAF;
MCP-1; monocyte chemotactic factor 1; monocyte secretory
                                                                                                                                                                                                                                                                                 cytokine #length 101 #molecular-weight 11402 #checksum
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Pred. No. 1.30e-06
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Pred. No. 2.88e-07;
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#journal
#authors Furutani, Y.; Nomura, H.; Notake, M.; Oyamada, Y.; Fukui, Yamada, M.; Larsen, C.G.; Oppenheim, J.J.; Matsushima, I #journal Biochem. Biophys. Res. Commun. 1991 159:249-255
Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF).
                                                                                                                                                                                                                                                                                                                                                                                             #journal
#title
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #journal FEBS Lett. (1989) 244:487-493
#title Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE.
#cross-references MUID:89153605
#accession S03339
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#journal Adv. Exp. Med. Biol. (1991) 305:47-56
#title Human monocyte chemoattractant protein-1 (MCP-1).
#cross-references MUID:92095166
#accession I51841
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#cross-references MUID:90097880
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##residues 1-99 ##label SHY
##cross-references GB:M37719; NID:g187447; PID:g487124
                                                                                                                                                                                              ##residues
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##molecule_type mRNA
##moclecule_type mRNA
1-99 ##label YO2
##rosidues 1-99 ##label YO2
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##residues 1-99 ##label ROL
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NCE A60299
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##cross-references GB:X14768; NID:g34513; PID:g34514
##experimental_source glioma cell line U-105MG
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The human homolog of the JE gene encodes a monocyte secretory
                                                                                                                                                                                                                                                                                                                                   Int. J. Cancer (1990) 45:795-797
A Chemoattractant expressed in human sarcoma cells
(tumor-derived chemotactic factor, TDCF) is identical to
monocyte chemoattractant protein-1/monocyte chemotactic and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Structure of human monocyte chemotactic protein gene and regulation by TPA.
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KEYWORDS
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#map_position 17q11.2-17q12
CLASSIFICATION #superfamily macrophage inflamm
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#journal Mol. Cell. Biochem. (1993) 126:61-68

#title The expression of monocyte chemotactic protein (MCP-1) in human vascular endothelium in vitro and in vivo.

#cross-references MUID:94150478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         #journal Biochem. Biophys. Res. Commun. (1990) 167:904-909
#title Identification of the monocyte chemotactic protein from human osteosarcoma cells and monocytes: detection of a novel
N-terminally processed form.
#cross-references_MUID:90211336
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EICLDPKQKWIQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                #superfamily macrophage inflammatory protein
cytokine; glycoprotein; inflammation; pyroglu
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#product monocyte chemoattractant protein 1, short form #status experimental #label MAT2\
#modified_site pyrrolidone carboxylic acid (Gln) (in mature form) #status experimental\
#binding_site carbohydrate (Asn) (covalent) #status
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                                                                                                                                                                              #molecular-weight 11025
                                                                                                          Score 88; DB 2; 1
Pred. No. 3.50e-06
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#accession A37034
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##cross-references EMBL:X79416; NID:g872312; PID:g872313
#ID:g872312; PID:g872313
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##cross-references GB:M28130; NID:g186367; PID:g186368
##note the authors failed to translate the last thirty-six
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##residues 1-99 ##label HOS
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9; Conservative
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interlexin-8 precursor - human
beta-thromboglobulin-11ke protein; fibroblast-derived
neutrophil-activating factor alpha; lung carcinoma-derived
chemotaxin; lymphocyte-derived neutrophil-activating
factor; monocyte-derived neutrophil chemotactic factor;
monocyte-derived neutrophil-activating factor
#formal_name Homo sapiens #common_name man
08-Dec-1992 #sequence_revision 08-Dec-1992 #text_change
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                                                                                                                                                                                                                   Mukaida, N.; Shiroo, M.; Matsushima, K.
J. Immunol. (1989) 143:1366-1371
Genomic structure of the human monocyte-derived neutrophil
chemotactic factor IL-8.
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A37034; JL0041; A32791; S37634; PL0107; A28598; A27488;

A39950; A60401; A60591; S15827; S04216; A60567; A60847;

S15417; S03975; I54560; I55992; I37902; S67519
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Scheit, K.H.
Blochem. Blophys. Res. Commun. (1994) 199:962-968
Porcine luteal cells express monocyte chemoattractant protein-1 (MCP-1): Analysis by polymerase chain reaction
Matsushima, K.; Morishita, K.; Yoshimura, T.; Lavu, S.; Kobayashi, Y.; Lew, W.; Appella, E.; Kung, H.F.; Leonard.
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#product monocyte chemoattractant protein-1 #status
predicted #label MATV
#binding_site carbohydrate (Asn) (covalent) #status
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Pred. No. 5.73e-06;
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#journal J. Exp. Med. (1989) 169:1895-1901

#title Purification and partial primary sequence of a chemotactic protein for polymorphonuclear leukocytes derived from human lung giant cell carcinoma LU65C cells.

#cross-references MUID:89279141
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#journal Mol. Cell. Biol. (1989) 9:1946-1957
#title Regulation of the mRNA for monocyte-derived
neutrophil-activating peptide in differentiating HL60
promyelocytes.
#cross-references_MUID:89313739
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#accession JL0041
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#accession A39960
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23-32,'xR',35,'X',37-52,'L',54 ##label
##experimental_source lung giant cell carcinoma LU65C
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##molecule_type mRNA
##residues 1-97 ##label KIN
##cross-references EMBL:Z11686; NID:g33958; PID:g33959
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#residues 1-99 ##label MA1
##cross-references EMBL:Y00787; NID:g34518; PID:g34519
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Biochem. Biophys. Res. Commun. (1988) 151:883-890
Structure determination of a human lymphocyte derived neutrophil activating peptide (LYNAP).
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J. Exp. Med. (1988) 167:1883-1893

Molecular cloning of a human monocyte-derived neutrophil chemotactic factor (MDNCF) and the induction of MDNCF mRNA by interleukin and tumor necrosis factor.
                                            Yoshimura, T.; Matsushima, K.; Tanaka, S.; Robinson Appella, E.; Oppenhelm, J.J.; Leonard, E., Proc. Natl. Acad. Sci. U.S.A. (1987) 84:9233-9237 Purification of a human monocyte-derived neutrophil chemotactic factor that has peptide sequence similother host defense cytokines.
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##residues 23-32 ##label SCH

##experimental_source dermal fibroblasts

##note a minor component of this material (15%) includes an

##note a minor component of this material (15%) includes an
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##residues 28-47 ##label VA3
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##residues 21-33,'X',35,'X',37-47 ##label YO2
##note the forms starting from positions 21, 23, and
##note represented 8%, 47%, and 45%, respectively,
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Car, B.D.; Baggiolini, M.; Walz, A. Biochem. J. (1991) 275:581-584 Formation of neutrophil-activating peptide 2 from
                                                                                                                                            granulocytosis-promoting A60847
                                                                                                                                                                                   Van Damme, J.; Van Beeumen, J.; Opdenakker, G.; Billiau, A. J. Exp. Med. (1988) 167:1364-1376
A novel, NH-2-terminal sequence-characterized human monokine possessing neutrophil chemotactic, skin-reactive, and
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Mol. Immunol. (1989) 26:87-93

Three forms of monocyte-derived neutrophil chemotactic factor (MDNCF) distinguished by different lengths of the amino-terminal sequence.
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Purification of granulocyte chemotactic peptide/interleukin-8
reveals N-terminal sequence heterogeneity similar to that
of beta-thromboglobulin.
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Generation of interleukin-8 by plasmin from AVLPR-interleukin-8, the human fibroblast-derived neutrophil chemotactic factor.
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Opdenakker, G.; Billiau, A.
Eur. J. Immunol. (1989) 19:1189-1194
The chemotactic activity for granulocytes produced by virally infected fibroblasts is identical to monocyte-derived
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II-lalpha or tumor necrosis factor-alpha stimulate release
three NAP-1/II-8-related neutrophil chemotactic proteins
human dermal fibroblasts.
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K.; Misumo, S.; Suzuki, K.
#journal Immunol. Lett. (1990) 24:165-170
Coding region structure of interleukin-8 gene of human lung
giant cell carcinoma LU65C cells that produce
LUCT/interliukin-8: homogeneity in interleuki-8 genes.
#cross-references MUID:90346419
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Neutrophil attractant protein-1 - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
23-Feb-1997
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Biochem, J. (1989) 259:585-588
Inflammatory cytokines induce synthesis and secretion protein and a neutrophil chemotactic factor but not beta-2--microglobulin in human synovial cells and
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J. Immunol. (1993) 151:6225-6236
CDNA cloning and expression of guinea pig neutrophil attractant protein-1 (NAP-1): NAP-1 is highly conserved
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#journal DNA Cell Biol. (1991) 10:671-679
#title Gene expression and cDNA coloning identified a major basic
protein constituent of bovine seminal plasma as bovine
monocyte-chemoattractant protein-1 (MCP-1).
#cross-references_MUID:92096117
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##residues 50-68,'X',70-74,'X',76 ##label WE2
##experimental_source seminal vesicle
##experimental_source seminal vesicle
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##residues 1-99 ##label WEM
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Local Similarity 75.0%;
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Local Similarity 75.0%;
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Biochem. Biophys. Res. Commun. (1994) 202:1272-1279
Characterization of the bovine monocyte chemoattract
protein-1 gene.
JC2336
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26/1;
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monocyte
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#length 99 #molecular-weight 11114 #checksum
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product monocyte chemoattractant protein 1 #status
predicted #label MAT\
#binding_site carbohydrate (Asn) (covalent) #status
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#type complete
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Pred. No. 4.05e-05;
2; Mismatches 1
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Pred. No. 4.05e-05;
2; Mismatches 1
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protein-1 -
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#accession I468
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                                                                             ##residues 1-109 ##label MIN
##cross-references EMBL:X71087; NID:g288396; PID:g288397
This protein induces proteinase secretion and chemo
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##cross-references GB:M57440; NID:g165469; PID:g165470
#FICATION #superfamily macrophage inflammatory protein

XY #length 125 #molecular-weight 13776 #check
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ne GDB:SCYA7; SCYA6; MCP-3
##Cross-references GDB:138473; OMI
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Local Similarity 81.8%;
hes 9; Conservative
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                                                                macrophages and monocytes.
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Molecular Cloning of MCP-3: a human monocyte-derived monocyte
                                                                                                                                                                                                                                                                                                                                                                                                  Biochem. Biophys. Res. Commun. (1993) 191:535-542
Human monocyte chemotactic protein-3 (MCP-3): Molecular
cloning of the cDNA and comparison with other chemokines.
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The human MCP-3 gene (SCYA7): cloning, sequence analysis, and assignment to the C-C chemokine gene cluster on chromosome 17q11.2-q12.
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monocyte chemotactic protein 3 precursor -
monocyte chemotactaractant protein MCP-3
#formal_name Homo sapiens #common_name man
28-Oct-1994 #sequence_revision 28-Oct-1994
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J. Immunol. (1991) 14483-3488
Neutrophil attractant/activation protein-1 and monocyte chemoattractant protein-1 in rabbit: cDNA cloning and expression in spleen cells.
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Pred. No. 6.56e-05;
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#introns 36/1; 75/2
CLASSIFICATION #superfamily macrophage inflammatory protein KEYWORDS cytokine; glycoprotein; inflammation
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#title
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#title Signal sequence trap: a cloning proteins and type I membrane #cross-references MUID:93342488
#accession 159582
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##residues 1-89 ##label RES
##cross-references GB:L12029; NII
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NCE 159582
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##residues 1-89 ##label NAG
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Local Similarity 66.7%;
les 8; Conservation
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Local Similarity 75.0%;
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cytokine
#length 89
                                       153416 #type complete
interleukin-8 homolog - mouse
#formal_name Mus sp. #common_name mouse
02-Aug-1996 #sequence_revision 02-Aug-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pre-B-cell growth-stimulating factor precursor - mouse #formal_name Mus musculus #common_name house mouse 02-Jun-1994 #sequence_revision 02-Jun-1994 #text_change
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3; Misma
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Pred. No. 1.06e-04;
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                                                                                                     #journal Science (1993) 261:600-603
#title Signal sequence trap: a cloning strategy
proteins and type I membrane proteins.
#cross-references MUID:93342488
#accession I81182
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#title Molecular cloning of TPARI, a gene whose expression is repressed by the tumor promoter 12-0-tetradecanoylphorbol 13-acetate (TPA).
#cross-references_MUID:95073497
                                                                                                                                                                                             #authors
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                                           ##molecule_type mRNA
##residues 1-93 ##label |
##cross-references GB:L12030;
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##residues
1-93 ##label SPO
##cross-references EMBL:016752; NID:91272194; P
##cross-references EMBL:016752; NID:91272194; P
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02-Aug-1996 #sequence_revision 02-Aug-1996 #text_change
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G07697
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cytokine SDF-1-beta - human
#formal_name Homo sapiens #common_name man
21_Dec_1996 #sequence_revision 06-Jun-1997 #text_change
 SDF-1-beta
#length 93
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Best Local Similarity 66.7%;
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#title
                                                                                                                                                                                                                                                             #title cDNA cloning of guinea pig monocyte chemoattractant protein-1 and expression of the recombinant protein.
#cross-references_MUID:93267104
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##residues 1-99 ##label HOS
##experimental_source corpus luteum
##experimental_source corpus luteum
                                                                                                                                                                                    ##status preliminary; translated from GB/EMBL/DDBJ
##molecule_type mRNA
##residues 1-120 ##label RES
##cross-references GB:L04985; NID:g349820; PID:g349821
                              71
                                                                            Match 78.2%;
Local Similarity 66.7%;
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Similarity 66.7%;
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monocyte chemoattractant protein-1 - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
09-May-1997
                                                                                                                       #superfamily macrophage inflammatory protein
#length 120 #molecular-weight 13741 #checksum
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Scheit, K.H.
Biophys. Res. Commun. (1994) 205:148-153
Porcine lutteal cells express monocyte chemoattractant
protein-2 (MCP-2): Analysis by cDNA cloning and northern
                                                                                                                                                       MCP-1
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J. Immunol. (1993) 150:5025-5032
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24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change
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#product monocyte chemoattractant protein-2 #status
predicted #label MAT
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Pred. No. 2.76e-04;
2; Mismatches 2
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Pred. No. 2.76e-04
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Pred. No. 1.71e-04;
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NID:g349820; PID:g349821
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Best Local Similarity 58.3%;
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#title
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#title Constitutive and allergen-induced
in the guinea pig lung.
#cross-references_MUID:95173589
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##colecule_type mRNA
##cresidues 1-97 ##label BAR
##cress-references EMBL:875668; NID:g1531982; PID:e251275; PID:g1531983
##experimental_source dermal fibroblast
"This protein has eosinophil specific chemotatic activity.
IFICATION #superfamily macrophage inflammatory protein
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Local Similarity 72.7%;
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JC2478
eotaxin
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eotaxin precursor - guinea pig
#formal_name Cavia porcellus #common_name guinea pig
02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change
09-May-1997
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Biochem. Biophys. Res. Commun. (1996) 225:1045-1051
Human dermal fibroblasts express ectaxin: Molecular cloning, mRNA expression, and identification of ectaxin sequence
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#length 97 #m
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Pred. No. 7.10e-04
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##cross-references EMBL:U22414; NID:g790632; PID:g790633
##CATION #superfamily macrophage inflammatory protein
#superfamily macrophage inflammatory protein
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#superfamily macrophage inflammatory protein
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This protein is identified as a potent eosinophil chemoattractant.
FICATION #superfamily macrophage inflammatory protein
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##residues 1-92
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Local Similarity 72.7%;
hes 8; Conservative
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Local Similarity 58.3%;
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monocyte chemotactic protein-2 - human
#formal_name Homo sapiens #common_name man
02-May-1997 #sequence_revision 18-Jul-1997
31-Oct-1997
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Biochem. Biophys. Res. Commun. (1994) 205:788-794
Eotaxin: Cloning of an eosinophil chemoattractant cytokine and increased mRNA expression in allergen-challenged
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shi, M.M.; Godleski, J.J.; Paulauskis, J.D.
Biochem. Biophys. Res. Commun. (1995) 211:289-295
Molecular cloning and posttranscriptional regulation of
macrophage inflammatory protein-1 alpha in alveolar
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macrophage inflammatory protein-lalpha -
#formal_name Rattus norvegicus #common_na
29-May-1998 #sequence_revision 29-May-199
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Pred. No.
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Pred. No. 2.88e-03;
3; Mismatches 2
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29-May-1998 #text_change
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Best Local Similarity 50.0%;
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#title
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#title Constitutive expression of a gene encoding a polypeptide homologous to biologically active human platelet protein Rous sarcoma virus-transformed fibroblasts virus transformed fibroblasts virus #cross references MUID:88016162
#accession 150417
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##cross-references GB:Y10802; NID:g1924937; PID:e294088; PID:g1924938
##cross-references GB:Y10802; NID:g1924937; PID:e294088; PID:g1924938
##cross-references GB:Y10802; NID:g1924938; PID:e294088; PID:g1924938
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##cross-ref
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IFICATION #superfamily beta-thromboglobulin
#length 103 #molecular-weight 11090 #checksum
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Similarity 58.3%;
7; Conservative
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RSV-induced protein - chicken
#formal_name Gallus gallus #common_name chicken
13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change
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                                                       #formal_name Gallus gallus #common_name chicken
19-Nov-1988 #sequence_revision 19-Nov-1988 #text_change
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#product monocyte chemotactic protein-2 #status
predicted #label MAT
jth 99 #molecular-weight 11246 #checksum 6596
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Pred. No. 4.56e-03;
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##cross-references GB:M16199; NID:g211735; PID:g211736
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#journal Cell (1987) 49:321-328
#title Transformation by Rous sarcoma virus induces a r
with homology to a mitogenic platelet protein
#cross-references MUID:87187628
#accession A26736
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                                                                                                                                                                                                                                                                                                                                                                                    authors
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NCE A44771
thors
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##residues 1-148 ##label
##cross-references GB:J04467;
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Local Similarity 58.3%;
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EVCADPKKEWVQ 84
                                              n 70.3%;
Similarity 58.3%;
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J. Biol. Chem. (1989) 264-679-682
Platelet-derived growth factor-inducible gene JE is of a family of small inducible genes related to pl factor 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rollins, B.J.; Morrison, E.D.; Stiles, C.D.
Proc. Natl. Acad. Sci. U.S.A. (1988) 85:3738-3742
Cloning and expression of JE, a gene inducible by
platelet-derived growth factor and whose product
cytokine-like properties.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PDGF-inducible JE glycoprotein precursor - mouse #formal_name Mus musculus #common_name house mouse 01-Dec-1989 #sequence_revision 01-Dec-1989 #text_change
                                                                                                predicted
#length 148 #mc
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26/1; 65/2
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#product transformation-induced
predicted #label MAT
#label 103 #molecular-weight 11056
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                                                                                                  #molecular-weight 16326
                             Score 71; DB 2; 1
Pred. No. 1.14e-02
2; Mismatches
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2; M
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Pred. No. 7.21e-03;
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NID:g193486; PID:g387168; GB:M19682
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NID:g193488; PID:g387169
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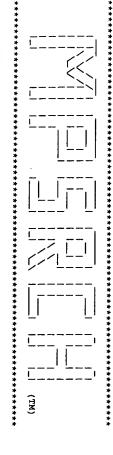
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#contents
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#title Cloning and characterization of a cDNA for murine macrophage
inflammatory protein (MIP), a novel monokine with
inflammatory and chemokinetic properties.
#cross-references MIID:88258380
                                                                                                                    #authors Brown, K.D.; Zurawski, S.M.; Mosmann, T.R.; Zurawski, G.
#journal J. Immunol. (1989) 142:679-687
#title A family of small inducible proteins secreted by leukocytes
are members of a new superfamily that includes leukocyte
and fibroblast-derived inflammatory agents, growth factors,
and indicators of various activation processes.
#cross-references_MUID:89093958
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#journal Proc. Natl. Acad. Sci. U.S.A. (1989) 86:1963-1967
#title cDNA sequence of two inducible T-cell genes.
#cross-references_MUID:89184547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            #title Sequence of the murine haemopoietic stem cell inhibitor/macrophage inflammatory protein 1-alpha #cross-references MUID:91016858
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##residues 1-92 ##label GRO
##coss-references EMBL:X53372; NID:g54062; PID:g297531
##note the authors' translation of the nucleotide sequence
##note differs at several positions from the sequence giv
        ##molecule_type mRNA

#residues 1-21,'L',23-61,'A',63-92 ##label BRO

##cross-references GB:M23447; NID:g533240; PID:g5332-
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##residues 1-48, 'E', 50-90, 'I', 92 ##label DA2
##cross-references EMBL: X12531
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##cross-references GB:J04491; NID:g201524; PID:g201525
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Nucleic Acids Res. (1990) 18:5561
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17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change
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#title Resolution of the two components of macrophage inflammatory protein 1, and cloning and characterization of one of those components, macrophage inflammatory protein 1 beta.
                     #accession
                  #cross-references MUID:90174947
#accession S07723
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ##residues 1-92 ##label RES
##cross references GB:M73061; NID:g199694; PID:g199695
                                                                                                                                                                                                                                                                                                                                                                                                       71 QICADSKETWVQ 82 : [| |:|: |:|
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Watch 66.3%;
Local Similarity 50.0%;
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                                                                                                                                                                                               monocyte chemoattractant protein-1
#formal_name Rattus norvegicus #common_name Norway rat
29-Jan-1993 #sequence_revision 29-Jan-1993 #text_change
08-sep-1997
                                                                         Timmers, H.T.M.; Pronk, G.J.; Bos, J.L.; van der Eb, A.J. Nucleic Acids Res. (1990) 18:33-34
Analysis of the rat JE gene promoter identifies an AP-1 binding site essential for basal expression but not for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       J. Immunol. (1991) 146:4031-4040
Genomic structure of murine macrophage inflammatory
protein-1-alpha and conservation of potential regulatory
sequences with a human homolog, LD78.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Widmer, U.; Yang, Z.; van Deventer, S.; Manogue, Sherry, B.; Cerami, A.
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Davatelis, G.; Wolpe, S.D.;
                                                                                                                                                                              S07723; JN0128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             #domain signal sequence #status predicted #label
#product macrophage inflammatory protein #status
experimental #label MAT
#length 92 #molecular-weight 10345 #checksum 5009
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                                                                                                                                                               S07723
                                                                                                                                                                                                                                                                               S07723 #type complete immediate-early serum-responsive protein JE -
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Pred. No. 6.80e-02;
4; Mismatches
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Masiarz, F.;
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Coit, D.; C
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GENETICS
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#authors
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Search completed: Thu Apr 1 07:45:44 1999 Job time: 17 secs.
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                                                                                                                                           В
                                                                                                                                                                                                                                                                                       SUMMARY
                                                                                                                                                                                   Query Match 66.3%; Score 67; DB 2; Length 148; Best Local Similarity 58.3%; Pred. No. 6.80e-02; Matches 7; Conservative 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        #authors Yoshimura, T.; Takeya, M.; Takahashi, K.
#journal Biochem. Biophys. Res. Commun. (1991) 174:504-509
Biochem. Biophys. Res. Commun. (1991) 174:504-509
WCP-1) and its expression in rat spleen cells and tumor
cell lines.
#cross-references MUID:91128376
#accession JN0128
#accession JN0128
##molecule_type mRNA
##residues_ 1-148 ##label YOS
##cross-references GB:M57441; NID:9205333; PID:9205334
##experimental_source spleen cells
the authors translated the codon GAA for residue 62 as
Lys and GCT for residue 63 as Leu
                                                                                                                                      73 EICADPNKEWVQ 84
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                                                                                            #domain signal sequence #status predicted #label SIG\
#product immediate-early serum-responsive protein JE
#status predicted #label MAT
#length 148 #molecular-weight 16460 #checksum 4876
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MPsrch_pp protein - protein database search, using Smith-Waterman algorithm

Run on: Thu Apr 1 07:44:14 1999; MasPar time 2.31 Seconds 139.571 Million cell updates/sec

Tabular output not generated.

Sequence: Perfect Score: Title: Description: >US-08-927-939-14 (1-12) from US08927939.pep 101 1 EICLDPKNOWNYY

Scoring table: PAM 150 Gap 15

Searched: 74019 seqs, 26840295 residues

Post-processing: Minimum Match 0\$ Listing first 100 summaries

Database: swiss-prot36 1:swissprot

Statistics: Mean 26.176; Variance 33.721; scale 0.776

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

888 87.1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 101 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Result NO. 1 2 3	Score 93 93 93 90		1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ID IL8_SHEEP IL8_CANFA IL8_PIG IL8_BOVIN IL8_BOVIN	Des INT INT INT	ion  KIN-8 PRECURS KIN-8 PRECURS KIN-8 PRECURS KIN-8 PRECURS
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01-FEB-1995 (REL. 3
01-FEB-1995 (REL. 3
01-NOV-1995 (REL. 3
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01-JUN-1994 (REL. 2
01-NOV-1995 (REL. 3
INTERLEUKIN-8 PRECU
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DISULFID
DISULFID
SEQUENCE
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INMUNOL. CELL BIOL. 72:398-405(1994)
-!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS.
-!- SUBUNIT: HOMODIMER.
-!- SUBUNIT: HOMODIMER.
-!- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINI
C-X-C) (CHEMOKINE CXC).
EMBL; S74336; G463354; -.
EMBL; S74436; G786591; -.
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P36925;
01-JUN-1994
SEQUENCE FROM N.A.
MEDLINE; 94010328.
ISHIKAWA J., SUZUKI S.,
GENE 131:305-306(1993).
                                                                                                           CANIS FAMILIARIS (DOG).
EUKARYOTA; METAZOA; CHORDATA;
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EUKARYOTA; METAZOA; CHORDATA;
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HSSP; P10145; 3IL8.
PROSITE; PS00471; SM
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Similarity 75.0%;
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E; CHEMOTAXIS; INFLAMATORY RESPO

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YJ9G_YEAST
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BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ARNAUD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SA574527
                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                    HIROTA
                                                                                                                                                                                                                                                                                                                                                                                                                      93; DB 1; 1
No. 1.14e-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CXC; 1. RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ON UPDATE)
                                                                                                                                                                                                   UPDATE)
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HYPOTHETICAL 182.0 KD
BOLA CLASS I HISTOCOMP
FOLYLPOLYGLUTAMATE SYN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CRC32;
                    ۲.
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                                                                                                           TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TETRAPODA;
                    MIZUNO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 101;
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                    :
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                                                                                                           MAMMALIA;
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                    SUZUKI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.07e+01
2.07e+01
3.12e+01
3.12e+01
                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                  ⊼:
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RREAR RELEASE
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Best Local S
Matches
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SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
TISSUB-LYMPH NODE;
MEDLINE; 95127913.
MATSUMOTO Y., MOHAMED A., COTISURA R., TSUJIMOTO H.,
ISHIKAWA J., HOTTA K., SUZI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                     IL8_PIG STANDARD; PRT; 103 AA.
P26894; P22951;
01-AUG-1991 (REL. 19, CREATED)
01-AUG-1992 (REL. 23, LAST SEQUENCE UPDATE)
01-OCT-1996 (REL. 34, LAST ANNOTATION UPDATE)
INTERLEUKIN-8 PRECURSOR (IL-8) (ALVEOLAR MACROPHAGE CHEMOTACTIC FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GOODMAN R.B., FOSTER D.C., MATHEWES FORSTROM J.W., MARTIN T.R.; BIOCHEMISTRY 31:10483-10490(1992).
                                                                                                                                                                                                                      SEQUENCE FROM N.A.
MEDLINE; 94103307.
LIN G., PEARSON A.E., SCAMURRA
WEISS D.J., MURTAUGH M.P.;
J. BIOL. CHEM. 269:77-85(1994).
                                                                    SEQUENCE FROM N.A., TISSUE-LUNG; MEDLINE; 93041741.
                                                                                                                                                                                                                                                                                                                                     ILB
SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
EUTHERIA; ARTIODACTYLA.
                                                                                                                                                SUBMITTED
                                                                                                                                                               SEQUENCE FROM N.A. SANJANWALA M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE; 95114148.
KUKIELKA G.L., SMITH W.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N
STRAIN-MONGREL;

 I) (AMCF-I).

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EICLDPKQKWIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                  93041741.
                                                                                                                                              (JUL-1991)
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34
36
101
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L; TISSUE-JUGULAR VEIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AA;
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75.0%;
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O H., HASEGAWA A., FURUSAWA S., YOSHIHARA K.,
SUZUKI K., HIROTA Y.;
                                                                                                                                                                                                                                                           SCAMURRA R.W.,
                                                                                                         SEQUENCE
                                                                                                                                              EMBL/GENBANK/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LAROSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 93; DB 1; 1
Pred. No. 1.14e-08;
3; Mismatches (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BY SIMILARITY.
BY SIMILARITY.
; 7C49D62D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SAG.J.,
B.J., YO
                                                                                                         OH
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                                                  .r.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MANNING
                                                    OSBORN
                                                                                                                                              DATA
                                                                                                                                                                                                                                                           Υ.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL
                                                                                                                                                                                                                                                             BAARSCH M.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
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                                                                                                                                              BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A.M.,
                                                    S.G.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HAWKINS
                                                    KUIJPER J.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              H.K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C-X-C) (CHEMOKINE CXC).

EMBL; M86923; G164521; -.

EMBL; M91151; G516197; -.

EMBL; M99367; G1235612; -.

PIR; A44253; A44253;

PIR; A39819; A39819;

HSSP; P10145; 3IL8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CONFLICT
                         PROSITE; ECYTOKINE; SIGNAL CHAIN
                                                                                                                                                                                                                                                                                                                                                IL8_BOVIN
P79255;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE; E
CYTOKINE;
SIGNAL
CHAIN
                                                                       CAMPOS M., BABIUK L.A.;

MICROB. PATHOG. 20:203-212(1996).

-I- FUNCTION: IL-8 IS A CHEMCATTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-I- FUNCTION: IL-8 IS A CHEMCATTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-I- SUBURITATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS (BY SIMILARITY).
-I- SUBURIT: HOMODIMER (BY SIMILARITY).
-I- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                            BOS TAURUS EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GOODMAN R.B., FORSTROM J.W., OSBORN S.G., CHI E.Y., MARTIN T.R.;
J. BIOL. CHEM. 266:8455-8463(1991).
-i- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
-i- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
RESTORATE ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS.
-i- SUBUNIT: HOMODIMER.
                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE; 96304552.
                                                                                                                                                                                                                                                                                                              01-NOV-1997
01-NOV-1997
                                                                                                                                                                                                                                                                                                                                      01-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRAIN=YORKSHIRE;
MEDLINE; 91217086.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE OF 26-45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUBMITTED
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <del>-</del> +
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                                                                                                                                                                                              MORSEY M.A.,
                                                                                                                                                                                                                                                EUTHERIA;
                                                                                                                                                                                                                                                                                                 INTERLEUKIN-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <del>:</del>
                                                                                                                                                                                                                                                                                                                                                                                                                                     75 EVCLDPKEKWVQ 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                              1 EICLDPKQKWIQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE SPECIFICITY: ALVEOLAR MACROPHAGES INDUCTION: BY LIPOPOLYSACCHARIDE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
S82598; G1699354; ..

E; PS00471; SMALL_CYTOKINES_CXC; 1.

E; PS00471; SMALL_CYTOKINES_CXC; 1.

E; CHEMOTAXIS; INFLAMMATORY RESPONSE; S:

1 22 BY SIMILARITY.

23 101 INTERLEUKIN-8.

3 101 BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0145; 3IL8.
PS00471; SMALL_CYTOKINES_CXC;
CHEMOTAXIS; INFLAMMATORY RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
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                                                                                                                                                                                                                                                 ARTIODACTYLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MAR-1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1
26
34
36
36
33
87
                                                                                                                                                                                                                                                          (BOVINE).
METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                               (REL. 35, CREATED)
(REL. 35, LAST SEQUENCE UP
(REL. 35, LAST ANNOTATION
-8 PRECURSOR (IL-8).
                                                                                                                                                                                               POPOWYCH Y., KOWALSKI J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A
A
                                                                                                                                                                                                                                                                                                                                                            STANDARD;
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103
61
77
34
87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      92.1%;
75.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
RC -> CR (IN REF. 5).
K -> KK (IN REF. 2).
W; A012D59D CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 93; DB 1; I
Pred. No. 1.14e-08;
3; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                             VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESPONSE;
                                                                                                                                                                                                                                                                                                                         UPDATE)
                                                                                                                                                                                                                                                                                                                                                            101 AA.
                                                                                                                                                                                                                                                                                                            UPDATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            _
                                                                                                                                                                                               GERLACH
                                                                                                                                                                                                                                                          TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                               G.,
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C STRAIN-NEW ZEALAND WHITE; TISSUE-PERITONEAL CAVITY;

STRAIN-NEW ZEALAND WHITE; TISSUE-PERITONEAL CAVITY;

STRAIN-NEW ZEALAND WHITE; TISSUE-PERITONEAL CAVITY;

MEDLINE; 91058518.

A WATERFIELD M.D., COLLINS P.D., JOSE P.J., TOTTY N.F., HSUAN J.,

A WATERFIELD M.D., WILLIAMS T.J.;

L BICCHEM. J. 271:797-801(1990)

C -!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,

C -!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,

C BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN

C NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN

C RESPONSE TO AN INFLAMMATORY STIMULUS.

C -!- SUBUNIT: HOMODIMER.

C -!- SUBUNIT: HOMODIMER.

C -!- SUBUNIT: HOMODIMER.

C --- SUBUNIT: HOMODIMER.

C --- SUBUNIT: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-XC) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 9; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 8; Consei
MCP1 HUMAN STANDAKU;

MCP1 HUMAN STANDAKU;

P13500;

01-JAN-1990 (REL. 13, CREATED)

01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)

15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)

MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1) (MONOCYTE CHEMOTACTIC

MONOCYTE CHEMOTACTIC PROTEIN 1 (MONOCYTE SECRETORY PROTEIN JE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DISULFID SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DISULFID
DISULFID
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IL8_RABIT STANDARD; PRT; 101 AA.

P19874;

01-FEB-1991 (REL. 17, CREATED)

01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)

01-NOY-1995 (REL. 32, LAST ANNOTATION UPDATE)

INTERLEUKIN-8 PRECURSOR (IL-8) (NEUTROPHIL ATTRACTANT/ACTIVATION PROTEIN-1) (NAP-1) (PERMEABILITY FACTOR 1) (RPF1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PIR; S13052; S13052.
HSSP; P10145; 3ILB.
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORYCTOLAGUS CUNICULUS (RABBIT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN-NEW ZEALAND WHITE; MEDLINE; 91225489.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EUTHERIA; LAGOMORPHA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     YOSHIMURA T., YUHKI N.;
J. IMMUNOL. 146:3483-3488(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                        75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           75
                                                                                                                                                                                                                                                                                                                        \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 EICLDPKQKWIQ 12
                                                                                                                                                                                                                                                                                                                                                  ELCLDPKEKWVQ 86
                                                                                                                                                                                                                                                                                                                        EICLDPKQKWIQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EVCLNPKEKWVQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                36
101 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101
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34
50
                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  YUHKI N.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22
101
61
77
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11291 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  89.1%;
75.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            50
11402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             89.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-SPLEEN;
                                                                                                                                                                                                                                                                                                                                                                                                                       Score
Pred.
3; M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INTERLEUKIN-8.
BY SIMILARITY.
BY SIMILARITY.
K -> I (IN REF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 90; DB 1; 1
Pred. No. 6.27e-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -> I (IN REF. 2 CB32CC30 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0E39C526 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                       re 90; DB 1; Lod. No. 6.27e-08; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2).
                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
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                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MAMMALIA;
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                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                          0
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YOSHIMURA T., YUHKI N., M
LEONARD E.J.;
FEBS LETT. 244:407
                                                                                                         LUBKOWSKI J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM MEDLINE; 90290 SHYY Y.J., LI
                                     MEDLINE; 96234959.
HANDEL T.M., DOMAILLE P.J.;
BIOCHEMISTRY 35:6569-6584(1996).
                                                                                                                                                                         MEDLINE; 91312872.
GRONENBORN A.M., CLORE G.M.;
PROTEIN ENG. 4:263-269(1991).
                                                                                                                                                                                                                                                                         SEQUENCE OF 29-53 AND MEDLINE; 90211336.
                                                                                                                                                                                                                                                                                                                         MEDLINE; 89184525.

ROBINSON E.A., YOSHIMURA T.,
SHABANOWITZ J., HUNT D.F., A
                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
MEDLINE; 92095166.
YOSHIMURA T., LEONARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 94150478.
LI Y.S., SHYY Y.J.,
KOLATTUKUDY P.E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 91207938.
CHANG H.C., HSU F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. MEDLINE; 91207938.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BIOCHEM. BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EUKARYOTA; METAZOA;
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OMOH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MONOCYTE CHEMOATTRACTANT PROTEIN 1) (HCll) (SMALL INDUCIBLE CYTOKINE A2).
MEDLINE;
                                                                               STRUCTURE
                                                                                                                                                                                                                                              DECOCK B., CONINGS
BIOCHEM. BIOPHYS. F
                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INT.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FURUTANI Y., NOMURA H.,
LARSEN C.G., OPPENHEIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
            EFFECT OF
                                                                                                                                               X-RAY CRYSTALLOGRAPHY (1.85 ANGSTROMS).
                                                                                                                                                                                                                                                                                                                 PROC. NATL. ACAD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOL. CELL. BIOCHEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ROLLINS B.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE;
                                                                                                                                                                                                       3D-STRUCTURE MODELLING. MEDLINE; 91312872.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CELL. BIOL. 9:4687-4695(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IMMUNOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OR MCP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E FROM N.A.; 90290466.
J., LI Y.S.,
BIOPHYS. RE
96195223.
                                                                                                                                                                                                                                                                                                                                                                     OF 24-99
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                                                                                                                                                                                                                                                                                                                                                                                               MED.
                                                                                 BY NMR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      244:487-493(1989).
                                                                                                        BIOL.
                                                                                                     BUJACZ G., DOMAILLE P.J., HANDEL T.M., BIOL. 4:64-69(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SU F., FREEMAN G.J.,
1:388-399(1989).
                                                                                                                                                                                                                                                                                                                                                                                               BIOL.
                                                                                                                                                                                                                                              RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RES.
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                                                                                                                                                                                                                                                                                                                 SCI. U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  126:61-68(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KOLATTUKUDY
ES. COMMUN. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WRIGHT J.G., VALENTE
                                                                                                                                                                                                                                                                                                                                                                                             ) E.J.;
305:47-56(1991).
                                                                                                                                                                                                                                                                                       82-92
           N-TERMINAL RESIDUES.
                                                                                                                                                                                                                                              LENAERTS
COMMUN. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         c
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J.J., MATSU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOORE S.K.,
                                                                                                                                                                                                                                                                                                                            APPELLA E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MATSUSHIMA K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                               86:1850-1854(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Y P.E.;
169:346-351(1990).
                                                                                                                                                                                                                                              5 J.-P., BILIAU A., VAN DAMME J.;
167:904-909(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WONG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPELLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A.J.,
                                                                                                                                                                                                                                                                                                                                         TANAKA S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 [F]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORNHILL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REINHERZ E.L.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LERMAN M.I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T.,
                                                                                                                      WLODAWER A.;
                                                                                                                                                                                                                                                                                                                                          GRIFFIN P.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             J.F.,
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Query Match
Best Local S
Matches 1
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EMBL; M30816; G386961; J
EMBL; M31625; G386961; J
EMBL; M24545; G307163; J
EMBL; M28226; G338009; J
EMBL; X14768; G3487124; ---
EMBL; M37719; G3487124; ---
EMBL; M28225; G338007; J
EMBL; M28225; G338007; J
EMBL; M28223; G338007; J
EMBL; M28223; G338007; J
EMBL; M28223; G338007; J
EMBL; S693284; G38007; J
                                                                             VARIANT
MUTAGEN
                                                                                                                                                                                                                                                                                                                                                      MOD_RES
DISULFID
DISULFID
                                                                                                                                                                                                                                                                                                                                                                                                                                    CYTOKINE;
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MUTAGENESIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PDB;
PDB;
PDB;
PDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PIR;
PIR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUBUNIT. MEDLINE; 97053697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               J. EXP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WEBER M.,
                                                                                                                                                                                                                                                                                                                                      CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                   CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEBS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KIM K.-S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZHANG Y.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 94253189.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BIOL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATHEROSCLEROSIS.
SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.
SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.
PTM: PROCESSING AT THE N-TERMINUS CAN REGULATE RECEPTOR AND TARGET
CELL SELECTIVITY DELETION OF THE AMINO- TERMINAL RESIDUE CONVERTS
IT FROM AN ACTIVATOR OF BASOPHIL TO AN EOSINOPHIL CHEMOATTRACTANT.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
SIMILARITY: BELONGS TO THE INTERCRINE DETA FAMILY (SMALL CYTOKINE
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND BASOPHILS BUT NOT NEUTROPHILS OR EOSINOPHILS. AUGMENTS MONOCYTE ANTI-TUMOR ACTIVITY. HAS BEEN IMPLICATED IN THE PATHOGENESIS OF DISEASES CHARACTERIZED BY MONOCYTIC INFILTRATES, LIKE PSORIASIS, RECUMATOID ARTHRITIS OR ATHEROSCLEROSIS. MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL WALL DURING THE DISEASE PROCESS OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A35474;
S03339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                K.-S., RAJARATHNAM K., C. LETT. 395:277-282(1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1DOK;
  Similarity
10; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               J., RUTLEDGE B.J., ROLLINS B.
CHEM. 269:15918-15924(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            UGUCCIONI M., BAGGIOLINI M., CLARK-LEWIS I., DAHINDEN C.A.;
ED. 183:681-685(1996).
                                                                               99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4-0CT-96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .2-MAR-97
                                                                                                     S03339
  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                      SMALL_CYTOKINES_CC; 1.
XIS; SIGNAL; INFLAMMATORY RESPONSE; 3D-STRUCTURE.
                                                                               11025
                      87.1%;
83.3%;
                                                                                                                     531
531
531
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531
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531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOINED.
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                                                                               M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLARK-LEWIS
Score
Pred. |
1; M
                                                                                               MISSING: LOSS OF ACTIVITY MISSING: LOSS OF ACTIVITY MISSING: LOSS OF ACTIVITY MISSING: 90% REDUCTION I PARTICLE OF ACTIVITY OF
                                                                                                                                                                                                                                                                                                                                                                                             MONOCYTE CHEMOTACTIC PROTEIN 1. PYRROLIDONE CARBOXYLIC ACID.
                                                                                                                                                                                                                                                                                                                                    POTENTIAL.
    Mismatches
                                                                                                                                     3: LOSS OF ACTIVITY.

IG: LOSS OF ACTIVITY.

IG: SOS OF ACTIVITY.

IG: GOS OF ACTIVITY.

IG: GOS REDUCTION IN ACTIVITY.

IG: 83% REDUCTION IN ACTIVITY.

90% REDUCTION IN ACTIVITY.

: 50% REDUCTION IN ACTIVITY.

TORROTTON IN ACTIVITY.
                      88; E
                                                                             REDUCTION CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Η.,
                      DB 1; Lo
1.93e-07;
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    1;
                                        Length 99;
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    Indels
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73 EICADPKQKWVQ

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FICLDPKQKWIQ

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Best Local S
Matches 1
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DISULFID
SEQUENCE
                                                                                                                              MCP1_PIG STANDARD; PRT; 99 AA.
P42831;
01-NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1).
SCYA2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LINDSEY M.I., HAWKINS H.K., BIRDSALL H.H., MACKAY C.R., LAROSA G.J., ROSSEN R.D., SMITH C.W., ENTMAN M.L.;
CIRCULATION 95:693-700(1997).

-i- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, BUT NOT NEUTROPHILS. IMPORTANT FACTOR IN THE COURSE OF THE INFLAMMATORY REACTION TO REPERFUSION OF THE PREVIOUSLY ISCHEMIC MYOCARDIUM. MAY PLAY A SIGNIFICANT ROLE IN MONOCYTE TRAFFICKING INTO THE REPERFUSED MYOCARDIUM.
                      SEQUENCE FROM N.A.
MEDLINE; 94183284.
HOSANG K., KNOKE I., K
BIOCHEM. BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -:- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
-:- INDUCTION: BY TNF-ALPHA.
-:- TISSUE SPECIFICITY: ENDOTHELIUM OF SMALL VEINS AND INTRAFASCICULAL
VEINS, AND INFILTRATING LEUKOCYTES.
-:- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SCYA2 OR MCP1.
CANIS FAMILIARIS (DOG)
EUKARYOTA; METAZOA; CH
                                                                                                                      SUS
                                                                                                                                                                                                                                                                                                                                                                                                                                             CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHEMOATTRACTANT PROTEIN-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            P52203;
01-OCT-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL;
SEQUENCE FROM N.A
                                                                                          EUTHERIA;
                                                                                                       EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                               MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KUMAR A.G., BALLANTYNE C.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FISSUE-JUGULAR VEIN ENDOTHELIAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MCP1_CANFA
                                                                                                                                                                                                                                                                                                                     Match 87.18;
Local Similarity 83.38;
les 10; Conservative
                                                                                                                                                                                                                                                                                            73 EICADPKQKWVQ 84
                                                                                                                                                                                                                                                                    \vdash
                                                                                                                SCROFA (PIG).
                                                                                                                                                                                                                                                                 EICLDPKQKWIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  U29653;
                                                                                                                                                                                                                                                                                                                                                                                                                                    (CHEWOTAL)

9653; G1144186; -.

PS00472; SMALL_CYTOKINES_CC; 1.

PS00472; SIGNAL; INFLAMMATORY RESPONSE.

BY SIMILARITY.

BY SIMILARITY.

CHEMOTACTIC P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CHEMOKINE CC).
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                                                                                         ARTIODACTYLA.
                                                                                                       METAZOA;
                                                                                                                                                                                                                                                                                                                                                                          101 AA;
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101
24
                                                                                                       CHORDATA;
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75
                         KLAUDINY
S. COMMUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E C.M., MICHAEL L'H., KUKIELKA G.L., YOUKER K.A.,
H.K., BIRDSALL H.H., MACKAY C.R., LAROSA G.J.,
                                                                                                                                                                                                                                                                                                                                                                           MW.
                                                                                                                                                                                                                                                                                                                     Score 88; DB 1; L
Pred. No. 1.93e-07;
1; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                     SIMILARITY).
BY SIMILARITY
BY SIMILARITY
                                                                                                                                                                                                                                                                                                                                                                                                                            MONOCYTE CHEMOTACTIC PROTEIN 1.
PYRROLIDONE CARBOXYLIC ACID (BY
                       J., WEMPE F., WUTTKE W., 199:962-968(1994).
                                                                                                    VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
                                                                                                                                                                                                                                                                                                                                                                        A7075B14 CRC32;
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SIMILARITY.
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                                                                                                    TETRAPODA; MAMMALIA;
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                                                                                                                                                                                                                                                                                                                                             Length 101;
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                                                                                                                                                                                                                                                                                                                     Indels
                                    SCHEIT
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Best Local S
Matches
                                                                       Query Match
Best Local Similarity
Matches 8; Conse
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MCP2_BOVIN STANDARD;

009141;

001-NOV-1995 (REL. 32, CREATED)

01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)

15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)

MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2)
                                                                                                                                                DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BOS TAURUS EUKARYOTA; !
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DISULFID
SEQUENCE
                                                                                                                                                                                                                            CHAIN
MOD_RES
                                                                                                                                                                                                                                                                SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE; 94114084.
WEMPE F., HANES J., SCHEIT
DNA CELL BIOL. 13:1-8(1994)
-!- FUNCTION: CHEMOTACTIC F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; Z48479; G683717; -. EMBL; X79416; G872313; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- SUBUNIT: MONOMER OR
-!- SIMILARITY: BELONGS
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                     EMBL; S67954; E118856; -
EMBL; S67956; G544997; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUBMITTED (JUL-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE-BRAIN;
ZACH O.R.F.;
                                                                                                                                                                                                                                                                                                                                                           C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                 -!- SUBUNIT: MONOMER OR HOMODIMER;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EUTHERIA; ARTIODACTYLA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOD_RES
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                                                                                                                                                                                                                                                                                    CYTOKINE;
                                                                                                                                                                                                                                                                                                       PROSITE;
                                     73
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                                                                                                                                                                                                                                                                                                                                                                                                                         CAN BIND HEPARIN.
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                                     DVCADPKQKWVQ
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 EICLDPKQKWIQ
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                                                                                                                                                                                                                                                                                                       PS00472;
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                                                                                                                                                                                                                                                                                      CHEMOTAXIS;
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METAZOA; CHORDATA;
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24
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                                                                                                                                                                                                        SMALL_CYTOKINES_CC; 1.

XIS; SIGNAL; HEPARIN-BINDING; INFLA
23 BY SIMILARITY.
29 MONOCYTE CHEMOTACTIC PR
99 PYRROLIDONE CARBOXYLIC
24 SIMILARITY).
 12
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                                                                                         84.2%;
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75.0%;
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75
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                                                                                                                                                                                                                                                                                                                                                                                                                                           FACTOR THAT ATTRACTS MONOCYTES.
                                                                                                                                                                                                                                                                                                                                                                             MODIMER; IN EQUILIBRIUM (BY SIMILARITY)
THE INTERCRINE BETA FAMILY (SMALL CYTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 87;
Pred. No.
                                                                     Score 85; DB 1;
Pred. No. 1.03e-06
3; Mismatches
                                                                                                                                                BY SIMILARITY.
BY SIMILARITY.
9BA2CD26 CRC32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred.
2; N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KINES_CC; 1.

INFLAMMATORY RESPONSE.

BY SIMILARITY.
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BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IN EQUILIBRIUM (BY ERCRINE BETA FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.39e-07
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                                                                                                                                                  CRC32;
                                                                         1:
                                                                                                         Length 99;
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                                                                                                                                                                                                                                                                                    INFLAMMATORY RESPONSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MONOCYTE
                                                                         Indels
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                                                                                                                                                                                                                            ACID
                                                                                                                                                                                                                                                                                                                                                                                 (SMALL CYTOKINE
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                                                                       Gaps
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Query Match
                                          CHAIN
MOD_RES
DISULFID
DISULFID
CARBOHYD
                                                                                                            CYTOKINE;
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                          SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES,
BASOPHILS AND EOSINOPHILS, BUT NOT NEUTROPHILS. SIGNALS THROUGH
CCR2B AND CCR3 RECEPTORS. PLAYS A ROLE IN THE ACCUMULATION OF
LEUROCYTES AT BOTH SIDES OF ALLERGIC AND NONALLERGIC INFLAMMATION.
MAY BE INVOLVED IN THE RECRUITMENT OF MONOCYTES INTO THE ARTERIAL
WALL DURING THE DISEASE PROCESS OF ARTHEROSCIEROSIS. MAY PLAY A
ROLE IN THE MONOCYTE ATTRACTION IN TISSUES CHRONICALLY EXPOSED TO
                                                                                                                                                       EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BERKHOUT T.A., SARAU H.M., MOORES K., WHITE J.R., ELSHOURBAGY N., APPELBAUM E., REAPE T.J., BRAWNER M., MAKWANA J., FOLEY J.J., SCHMIDT D.B., IMBURGIA C., MACULITY D., MATTHEWS J., O'DONNELL K. O'SHANNESSY D., SCOTT M., GROOT P.H.E., MACPHEE C.; J. BIOL. CHEM. 272:16404-16413(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE: 97113354.
GARCIA-ZEPEDA E.A., COMBADIERE C.,
LAVIGNE F., HAMID Q., MURPHY P.M.,
J. IMMUNOL. 157:5613-5626(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-JUL-1998 (REL. 36, CREATED)
15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 4 PRECURSOR (MCP
CHEMOATTRACTANT PROTEIN 4) (CK-BETA10) (NCC-1
SCYA13 OR MCP4 OR NCC1.
                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                         ----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM DANTE M., GIBS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BERKHOUT T.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-FETAL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               UGUCCIONI M., LOETSCHER P., FORSSMANN LI Y., KREIDER B., GAROTTA G., THELEN J. EXP. MED. 183:2379-2384(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 96235049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HOMO SAPIENS (HUMAN)
EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MCP4_HUMAN
Q99616;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE
                                                                                                                                           PROSITE;
                                                                                                                                                                                                                <u>.</u>
                                                                                                                                                                                                          MASS SPECTROMETRY: MW-9314; MW_ERR-30; METHOD-MALDI; RANGE-17-9
MASS SPECTROMETRY: MW-8760; MM_ERR-30; METHOD-MALDI; RANGE-22-9
MASS SPECTROMETRY: MW-8575; MM_ERR-30; METHOD-MALDI; RANGE-24-9
INDUCTION: BY INTERLEUKIN-1 AND TNF-ALPHA.
TISSUE SPECIFICITY: WIDELY EXPRESSED. FOUND IN SMALL INTESTINE,
TISSUE SPECIFICITY: WIDELY EXPRESSED. FOUND IN SMALL INTESTINE,
THYMUS, COLON, LUNG, TRACHEA, STOMACH AND LYMPH NODE. LOW LEVEL
SEEN IN THE PULMONARY ARTERY SMOOTH MUSCLE CELLS.
THIS PROTEIN CAN BIND HEPARIN.
PTM: ONE MAJOR ISOFORM MCP-4, AND TWO MINOR ISOFORMS (LA)MCP-4
(FN)MCP-4 IS ABOUT 30 FOLD LESS ACTIVE THAN MCP-4.
SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKI
                                                                                                                                                                                 SIMILARITY: BELONGS TO C-C) (CHEMOKINE CC).
L; U46767; G1732123; -.
                                                                                                                                                                                                                                                                                                                                                                                  EXOGENOUS PATHOGENS.
                                                                                                                                                                     AC002482; G2340091;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97341179
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                                                                                                                            CHEMOTAXIS;
                                          24
34
35
29
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                                                                                                                                         SMALL_CYTOKINES_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AND
                             10986 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AND
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                                                                                                                            SIGNAL;
 . 28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE OF
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                                         PYRROLIDONE CAR
BY SIMILARITY.
BY SIMILARITY.
POTENTIAL.
 Score
                                                                                                MONOCYTE CHEMOTACTIC PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                           DF52F6EC CRC32
                                                                                                                            GLYCOPROTEIN; INFLAMMATORY RESPONSE
                                                                                                                                                                                                           INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엵
 84;
                                                                                                                                           3
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LUSTER A.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-33.
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(NCC-1).
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DB 1;
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                                                                                     CARBOXYLIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEWALD B.,
BAGGIOLINI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ., M.E.,
Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MONOCYTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SARAFI M.N.,
98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              X E
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                                                                                                                                                                                                                                                                                               INTESTINE,
                                                                                                                                                                                                                                                                                                                                      RANGE=22-98
RANGE=24-98
                                                                                                                                                                                                                                                                                                                                                                  RANGE-17-98
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RESULT STATES OF THE STATE OF THE STATES OF 
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Matches 9; Conservative
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P10145;
01-MAR-1989
01-MAR-1989
01-MAR-1998
                                                                                                              SEQUENCE MEDLINE; WALZ A.,
                                                                                                                                                                                                                                MEDLINE;
GREGORY F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAR-1989 (REL. 10, CREATED)
01-MAR-1989 (REL. 10, LAST SEQUENCE UPDATE)
15-JUL-1989 (REL. 36, LAST ANNOTATION UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
1NTERLEUKIN-8 PRECURSOR (IL-8) (MONCYTE-DERIVED NEUTROPHIL
CHEMOTACTIC FACTOR) (MUNCF) (T-CELL CHEMOTACTIC FACTOR) (NEUTROPHIL-
ACTIVATING FACTOR) (LYANA) (PROTEIN 3-10C) (MEUTROPHIL-ACTIVATING
ACTIVATING FACTOR) (MAP) (GRANULOCYTE CHEMOTACTIC PROTEIN 1) (GCP-1) (EMOCTAKIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE OF 23-46. MEDLINE; 89246368.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
MEDLINE: 87224164.
SCHMID J. WEISSMANN C.;
J. IMMUNCL. 139:250-256(1987).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MATSUSHIMA K., MORISHITA K., YOS
LEW W., APPELLA E., KUNG H., LEO
J. EXP. MED. 167:1883-1893(1988)
                       SEQUENCE OF 28-69
MEDLINE; 88097462
                                                                                                                                                                                                           BIOCHEM.
                                                                                                                                                                                                                                                                                                                                            SUZUKI K., MIYASAKA
MIZUNO S.;
                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE OF 23-54.
MEDLINE; 89279141.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           GOLDS E.E.,
BIOCHEM. J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUBMITTED (JAN-1993)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
MEDLINE; 89309826.
MURAIDA N., SHIROO M., MATSUSHIMA
J. IMMUNOL. 143:1366-1371(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. MEDLINE; 89313739. KOWALSKI J., DENHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A. MEDLINE; 88258376.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HOMO SAPIENS (HUMAN)
EUKARYOTA; METAZOA;
                                                                                            BIOCHEM.
                                                                                                                                                                                                                                                                        SEQUENCE OF 28-99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                       EXP.
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                                                                                                                                                                                                                             H., YOUNG
                                                                                                                                                                                                                                                                                                                         MED.
                                                                                         88106502.
PEVERI P.,
BIOPHYS. RE
                                                                                                                                                                                                           BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ٦.;
T., MATSUSHIMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              MASON P., NYIRKOS
259:585-588(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DENHARDT
                                                                                                                                                                                                                                                                                                                     169:1895-1901(1989)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HARDT D.T.;
9:1946-1957(1989).
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                                                                                         ASCHAUER H., BAGGIOLINI M.;
ES. COMMUN. 149:755-761(1987)
                                                                                                                                                                                                                                                                                                                                                                  Ή.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          or
                                                                                                                                                                                                        SCHROEDER J.M., MROWIETZ U., COMMUN. 151:883-890(1988).
                                                                                                                                                                                                                                                                                                                                                                  OTA H., YAMAKAWA Y., TAGAWA M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL/GENBANK/DDBJ DATA BANKS
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H., LEONARD E.
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2; Mismatches 1;
  TANAKA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRT;
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  ROBINSON
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  E.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                CHRISTOPHERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KOBAYASHI
M J.J.;
  APPELLA
                                                                                                                                                                                                                                                                                                                                                                    KURAMOTO A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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-i- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE CXC).

CX-C) (CHEMOKINE CXC).

EMBL; Y00787; G34519; -...

EMBL; M17017; G179580; -...

EMBL; M25383; G188628; -...

EMBL; M25383; G188628; -...

EMBL; M25383; G186368; -...

EMBL; M25383; G186368; -...

EMBL; M253975; S03975.

PIR; S04216; S04216.

PIR; S04216; S04216.

PIR; S04216; S04216.
                                                                                                                                                                                                                MEDLINE; 91175767.
CLARK-LEWIS I., MOSE B.,
                                                                                                                                                                                                                                                                                                                                                                         N-TERMINAL FORMS.
MEDLINE; 89231715.
VAN DAMME J., VAN BEEUMEN J., CONINGS R.,
EUR. J. BIOCHEM. 181:337-344(1989).
                                                                                                                                                                                                                                                                                                                                                                                                                       WILLEMS J., BILLIAU A.;
EUR. J. IMMUNOL. 20:2113-2118(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                             N-TERMINAL FORMS.
MEDLINE; 91006326.
VAN DAMME J., RAMPART M., CONING R.,
WILLEMS J., BILLIAU A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE; 91110556.
BALDWIN E.T., WEBER I.T., ST CHARLES R.
YAMADA M., MATSUSHIMA K., EDWARDS B.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        X-RAY CRYSTALLOGRAPHY, AND STRUC
MEDLINE; 91171286.
CLORE G.M., GRONENBORN A.M.;
J. MOL. BIOL. 217:611-620(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE; 90216714.
BALDWIN E.T., FRANKLIN K.A., APPELLA WLODAWER A., WEBER I.T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRUCTURE BY MWR.
MEDLINE; 90234679.
CLORE G.M., APPELLA E., YAMADA M.,
BIOCHEMISTRY 29:1689-1696(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OPPENHEIM J.J., LEONARD E.J.;
PROC. NATL. ACAD. SCI. U.S.A.
                                                                                                                                                                                                                                                                                                                BIOCHEMISTRY 30:3128-3135(1991).
                                                                                                                                                                                                                                                                                                                                                      SYNTHESIS OF 28-99.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          X-RAY CRYSTALLOGRAPHY (1.6 ANGSTROMS), MEDLINE; 91110556.
                                                                                                                                                                                                        ÷÷
                                                                                                                                                                                                                                                                                    MEDLINE;
                                                                                                                                                                                                                                                                                             REVIEW.
                                                                                                                                                                                                                                                                                                                           AEBERSOLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROC. NATL. ACAD.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ODAWER A., WEBER I.T.;
BIOL. CHEM. 265:6851-6853(1990).
                                                                                     2IL8; 15-JAN-91.
3IL8; 15-OCT-92.
                                                                                                                                                                                                                                                                                   92347562
                            SMALL_CYTOKINES_CXC; 1.
xis; inflammatory response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 U.S.A. 88:502-506(1991).
                                                                                                                                                                                                                                                                                                                                  WALZ A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRUCTURE
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 INTERLEUKIN-8.

ONE OR MORE OF THESE RESIDUES ARE MISSING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  84:9233-9237(1987)
                                                                                                                                                                                                                                                                                                                                   BAGGIOLINI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MATSUSHIMA K., GRONENBORN A.M.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           DECOCK
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                             SIGNAL;
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                             3D-STRUCTURE
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RESULT NO. COLOR RANGE OF COLOR RANG
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Best Local Similarity
Matches 8; Conse
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Best Local
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DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                      YOSHIMURA T., JOHNSON D.G.;
J. IMMUNOL. 151:6225-6236(1993).
J. IMMUNOL. 151:6225-6236(1993).
-i- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOPHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS (BY SIMILARITY).
-i- SUBUNIT: HOMODIMER (BY SIMILARITY).
-i- SUBUNIT: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAND
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MCPA_BOVIN STANDARD;
P28291;
01-DEC-1992 (REL. 24, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IT 12

ILCAVPO STANDARD; PRT; 101 AA P49113;

01-FEB-1996 (REL. 33, CREATED)

01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)

01-CCT-1996 (REL. 34, LAST ANNOTATION UPDAT INTERLEUKIN-8 PRECURSOR (IL-8) (NEUTROPHIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HELIX
TURN
                                                                                                                                                                                                                                                                                                      CHAIN
                                                                                                                                                                                                                                                                                                                     SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAVIA PORCELLUS (GUINEA PIG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FISSUE-SPLEEN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (NAP-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE; 94065176
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Pred. No. 1.79e-
4; Mismatches
                                                                                                                                                                             Pred.
                                                                                                                                                                                                                  Score
                                                                                                                                                                                                                                                                   BY SIMILARITY.
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                      INTERLEUKIN-8
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(NEUTROPHIL ATTRACTANT PROTEIN 1)
                                                                                                                                                                                                                                                     E13FB521 CRC32;
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No. 1.79e-06
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MCP1_RABIT STANDARD; PRT; 125 AA P28292; PC CREATED) 01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE) MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MONOCYTE CHEMOTACTIC PROTEIN 1 PROT
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BIOCHEM. BIOPHYS. RES. COMMUN. 202:1272-1279(1994)
-!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TISSUE-SEMINAL PLASMA;
TISSUE-SEMINAL PLASMA;
MEDLINE; 92096117.
WEMPE F., HENSCHEN A., SCHEIT K.H.;
DNA CELL BIOL. 10:671-679(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEMINAL FLUID PROTEIN).
BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                                                YOSHIMURA T., YUHKI N.;
J. IMMUNOL. 146:3483-3488(1991).
-!- FUNCTION: CHEMOTACTIC FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                ORYCTOLAGUS CUNICULUS (RABBIT EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-DEC-1992 (REL. 24, LAST SEQUENCE UPDATE)
01-NOV-1995 (REL. 32, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1A PRECURSOR (MCP-1A)
                                                                                                                                                                                                                                        STRAIN-NEW ZEALAND WHITE; MEDLINE; 91225489.
                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SCYA2
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PIR; JC2336; JC2336.
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WEMPE F., EINSPAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                    EUTHERIA; LAGOMORPHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BIOCHEM.
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    NEUTROPHILS.
SUBUNIT: MONOMER OR
SIMILARITY: BELONGS
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TE; PS00472; ;
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24
                                                                                                                                                                                                                                                                                                                                                                                                (RABBIT).
"^¬¬aTA; VERTEBRATA;
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COMMUN. 183:232-237(1992).
HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ¥,
                                                                                                                                                                                                                                                                            TISSUE-SPLEEN
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Pred. No. 3.10e-06
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BY SIMILARITY.
C8F5821D CRC32
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MONOCYTE CHEMOTACTIC PI
PYRROLIDONE CARBOXYLIC
SIMILARITY).
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                                                                                                                    THAT
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                                                                                                                    ATTRACTS
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SOR (MCP-1).
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                                                                                                                                                                                                                                                                                                                                                                                                                                    TETRAPODA; MAMMALIA;
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                                                                                                                    MONOCYTES,
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01-FEB-1996
15-JUL-1998
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HSSP; P1:
PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CARBOHYD
CARBOHYD
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P48298;
                                DISULFID DISULFID
                                                                                       SIGNAL
CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GONZALO J.-A., JIA G.-Q., AGUIRRE JENKINS N.A., LIN G.-S., KATZ H., GUTIERREZ-RAMOS J.-C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ROTHENBERG M.E., I
PROC. NATL. ACAD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-FEB-1996 (REL. 33, CREATED)
01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
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                                                                                                                                                                                                                           EMBL; U26426; G995911; -.
EMBL; U40672; G1113937; -.
MGD; MGI:103576; SCYA11.
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EUKARYOTA; MI
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     SEQUENCE
                                                                                                                                                                                                                                                                                                                                             -!- PTM: O-GLYCOSYLATED (PROBABLE).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOD_RES
                                                                                                                                                                                                         PROSITE;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-LUNG;
                                                                                                                                                  INFLAMMATORY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               74 ICADPKQKWVQ
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TISSUE SPECIFICITY: EXPRESSED CONSTITUTIVELY IN THE THYMUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, T
DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS (A
FEATURE OF ALLERGIC INFLAMMATORY REACTIONS), BUT NOT
LYMPHOCYTES, MACROPHAGES OR NEUTROPHILS.
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L; M57440; G165470;
                                                                                                                                                                                                                                                                                                                                                                                                 INDUCTION: BY INTERFERON-GAMMA AND LIPOPOLYSACCHARIDE (LPS).
                                                                                                                                                                                                                                                                                                                                                                                                                              EXPRESSION INDUCIBLE IN THE LUNG (TYPE I CELLS), INTESTINE, HEART, SPLEEN, KIDNEY
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3500; IMCA.
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2700; IMCA.
2800; IMCA.
290; I
                                                                                                                                                                      PS00472; SMALL_CYTOKINES_CC; IL; CYTOKINE; CHEMOTAXIS; GLYC
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                                                                                                                                                                                                                                                                                                               (CHEMOKINE CC).
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LUSTER A.D., I
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGUIRRE V., FRIEND D.,
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Pred. No.
POTENTIAL.
EOTAXIN.
BY SIMILARITY.
BY SIMILARITY.
F85A96BC CRC32;
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92:8960-8964(1995).
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                                                                                                                                                                         GLYCOPROTEIN;
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No. 5.35e-06;
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                                                                                                                                                                         SIGNAL
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Best Local :
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SEQUENCE
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DISULFID
CARBOHYD
                                                                                                                                                            P80098;
01-DEC-1992 (REL. 24, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (MCP-3) (MONOCYTE CHEMOATTRACTANT PROTEIN 3) (NC28).
SCYA7 OR MCP3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.

-!- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, THIS PROTEIN DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, A PROMINENT FEATURE OF ALLERGIC INFLAMMATORY REACTIONS (BY SIMILARITY).

-!- SUBCELLULAR LOCATION: EXTRACELLULAR.

-!- PTM: O-GLYCOSYLATED (PROBABLE).

-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINI)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EOTA_RAT STANDARD; PRT; 97 AA p97545; 008780; 15-JUL-1998 (REL. 36, CREATED) 15-JUL-1998 (REL. 36, LAST SEQUENCE UPDATE) 15-JUL-1998 (REL. 36, LAST ANNOTATION UPDAT EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PRATTUS NORVEGICUS (RAT).
                                                           HOMO SAPIENS (HUMAN)
EUKARYOTA; METAZOA;
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. WILLIAMS C.M., NEWTON FLANAGAN B.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; Y08358; E274141; -.
EMBL; U96637; G2098785; -.
PROSITE; PS00472; SMALL_CYTOKINES_CC;
SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                           MCP3_HUMAN
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||| ||| ||:|
1 EICLDPKQKWIQ 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CYTOKINE; CHEMOTAXIS;
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larity 75.0%;
Conservative
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AND
                                                                                             CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TO
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SEQUENCE OF
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Pred. No. 9.23e-06;
1; Mismatches 2;
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EOTAXIN.
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POTENTIAL.
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05B4ED45 CRC32;
                                                                                             VERTEBRATA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ဖ
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   AND
                                                                                             TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DATA BANKS
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MEDLINE; 94375065.

OPDENAKER G., FITEN P., NY:
LAUREYS G., VAN DAMME J.;
GENOMICS 21:403-408(1994).
                                                                                                                                                                                                                                                 SIGNAL
CHAIN
MOD_RES
DISULFID
DISULFID
CARBOHYD
CONFLICT
CONFLICT
SEQUENCE
                                                                                                                                                                                                                                                                                 MEDLINE: 97263733.

MEUNIER S., BERNASSAU J.-M., GUILLEMOT J.-C., L.....

BIOCHEMISTRY 36:4412-4422(1997).

FINCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES AND EOSINOPHILS, BUT NOT NEUTROPHILS. AUGMENTS MONOCYTE ANTI-
                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.

MEDLINE; 9335913.

MINTY A., CHALON P., GUILLEMOT J.C., KAG
MAGAZIN M., MILOUX B., MINTY C., RAMOND
SHIRE D., FERRARA P., CAPUT D.;
EUR. CYTOKINE NETW. 4:99-110(1993).
                                                                                                                                                                                                                                                                                                                                                             KIM K.-S.,
FEBS LETT.
                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-OSTEOSARCOMA;
MEDLINE; 92308855.
VAN DAMME J., PROOST
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OPDENAKKER G., FRO
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                                                                                                                                           NFLAMMATORY
                                        Local
                                                                                                                                                                                BL; X72308; G313708; ALT_INIT.
BL; X72309; -; NOT_ANNOTATED_CDS
BL; X71087; G288399; -
BL; X71087; G288398; ALT_INIT.
BL; X71087; G288397; ALT_INIT.
R; JC1478; JC1478.
R; JC1478; JC1478.
R; JC1478; A54678.
               73 EICADPTQKWVQ
                                                 Match
EICLDPKQKWIQ
                                Similarity
9; Conser
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                                                                                                                                        PS00472; SMALL_CYTOKINES_CC; 1; CHEMOTAXIS; HEPARIN-BINDING; TORY RESPONSE; 3D-STRUCTURE.
                                                                                                                                                                                                                                                                                                                                                             395:277-282(1996).
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Pred. No. 9.
1; Mismatcl
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                                                                                                                 PYRROLIDONE CARBOXYLIC
                                                                                                                          MONOCYTE CHEMOTACTIC
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191:535-542(1993).
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                                 Mismatches
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OND P.,
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; GLYCOPROTEIN;
                                        DB 1; I
9.23e-06;
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THIS PROTEIN
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Best Local
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SDF1_HUMAN
P48061;
01-FEB-1996
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01-FEB-1995 (REL. 31, CREATED)
01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION (SDF-1) (PRE-B CELL GROWTH
STROMAL CELL-DERIVED FACTOR 1 PRECURSOR (SDF-1) (PRE-B CELL GROWTH
STIMULATING FACTOR) (PBSF) (12-O-TETRADECANOYLPHORBOL 13-ACETATE
REPRESSED PROTEIN 1) (TPAR1) (THYMIC LYMPHOMA CELL STIMULATING FACTOR)
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DISULFID
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SIGNAL
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EMBL;
EMBL;
EMBL;
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PROGENITOR CELLS IN THE PRESENCE OF IL-7 AS WELL AS GROWTH OF T
STROMAL CELL-DEPENDENT B-CELL CLONE DM34 CELLS.
-i- ALTERNATIVE PRODUCTS: TWO DIFFERENT FORMS (ALPHA AND BETA) ARE
PROBABLY GENERATED BY ALTERNATIVE SPLICING.
-i- SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NOMURA M., NAKATA Y., UZAWA A., NOSE M., AKASHI M., SU: SUBMITTED (DEC-1994) TO EMBL/GENBANK/DDBJ DATA BANKS.
-!- FUNCTION: CHEMOATTRACTANT ACTIVE ON T-LYMPHOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JIANG W., ZHOU P., KAHN WEINSTEIN I.B.; EXP. CELL RES. 215:284-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
MEDLINE: 93342488.
TASHIRO K., TADA H., HEILK
SCIENCE 261:600-603(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAGASAWA T., KIKUTANI I
PROC. NATL. ACAD. SCI.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MGD; MGI:103556; SDF1.
PROSITE; PS00471; SMAI
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EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (TLSF).
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C-X-C) (CHEMOKINE CXC).

D21072; G468457; -

12029; G393180; -

12030; G393182; -

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                                                                                                                                                                                         EICLDPKQKWIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A53497; A53497
                                                                                                                                                                                                                                                                                                                                            Similarity
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ACAD. SCI. U.S.A. 91:2305-2309(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   215:284-293(1994).
                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STANDARD;
                                                                                                                                                                                         12
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   33, CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                         10032 MW;
                                                                                                                                                                                                                                                                                                                                            79.2%;
66.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GROWTH
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Pred.
3; M
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BY SIMILARITY.
K -> KRLKM (IN FORM BETA).
222C4E52 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FACTOR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STROMAL CELL-DERIVED FACTOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOMITA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
                                                                PRT;
                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SHIROZU M., NAKANO T., HONJO T.;
                                                                                                                                                                                                                                                                                                                                            NO ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N.
                                                                                                                                                                                                                                                                                                                                         DB 1; Lo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL; ALTERNATIVE SPLICING.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                89
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                                                                                                                                                                                                                                                                                                            1;
                                                                                                                                                                                                                                                                                                                                                                   Length 89;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MONOCYTES,
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Best Local Similarity
Matches 8; Consei
                                                       SEQUENCE FROM N.A.
MEDLINE; 96181758.
GARCIA-ZEPEDA E.A., ROTHENB
LUSTER A.D.;
NAT. MED. 2:449-456(1996).
                                                                                                                                                                                                                                                                                                                                                                          JT 20
EOTA_HUMAN STANDARD; PRT; 9, 64.
P51671; P50877; Q92490; Q92491;
01-CCT-1996 (REL. 34, CREATED)
01-CCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-NCV-1997 (REL. 35, LAST ANNOTATION UPDATE)
01-NCV-1997 (REL. 35, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DISULFID DISULFID
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1 ALTERNATIVE PRODUCTS: TWO DIFFERENT FORMS (ALPHA AND PROBABLY GENERATED BY ALTERNATIVE SPLICING.

1 SIMILARITY: BELONGS TO THE INTERCRINE ALPHA FAMILY (SCACO) (CHEMOKINE CXC).

EMBL; U16752; G571508; ---
EMBL; L36033; G1220366; ---
EMBL; L36033; G1220366; ---
PDB; 15DF; 28-JAN-98.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-FEB-1996 (REL. 33, LAST SEQUENCE UPDATE)
15-UTL-1998 (REL. 36, LAST ANNOTATION UPDATE)
STROWAL CELL-DERIYED FACTOR 1 PRECURSOR (SDF-1)
STIMULATING FACTOR) (PBSF).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CRUMP M.P., GONG J.H., LOETSCHER P., RAJARATHNAM K., AMARA ARENZANA-SEISDEDOS F., VIRELIZIER J.L., BAGGIOLINI M., SYKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SHIROZU M., NAKANO T., SHINOHARA T., HONJO T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                               EUKARYOTA; METAZOA;
EUTHERIA; PRIMATES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3D-STRUCTURE.
SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00471; SMALL_CYTOKINES_CXC; FALSE_NEG.
CYTOKINE; CHEMOTAXIS; GROWTH FACTOR; SIGNAL; ALTERNATIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBO J. 16:6996-7007(1997)
SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                 HOMO SAPIENS (HUMAN)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         - i - FUNCTION: CHEMOATTRACTANT ACTIVE ON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRUCTURE BY NMR OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENOMICS 28:495-500(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                  CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                               ROTHENBERG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 80; DB 1; 1
Pred. No. 1.59e-05;
3; Mismatches
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STROMAL CELL-DERIVED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERTEBRATA;
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                                                                                                                               OWNBEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            T-LYMPHOCYTES, MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                                                                      PROTEIN).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ALPHA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DATA
                                                                                                                            T.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BANKS
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                                                                                                                               LEDER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   93;
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Best Local S
Matches
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EMBL; U34780; G1185440; ...
EMBL; D49372; G1552241; ...
EMBL; Z69291; E221070; ...
EMBL; Z75668; E251275; ...
EMBL; Z75669; E251278; ...
EMBL; Z75669; E251258; ...
EMBL; Z75669; E251258; ...
EMBL; Z92709; E329504; ...
                                                                                                                      DISULFID
DISULFID
VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 97312708.

GARCIA-ZEPEDA E.A., ROTHENI MORTON C.C., LUSTER A.D.; GENOMICS 41:471-476(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              J. CLIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 96189937.
PONATH P.D., QIN S., RINGLER D.J., CLARK-LEWIS I., WANG J.,
SMITH H., SHI X., GONZALO J.A., NEWMAN W., GUTIERREZ-RAMOS
                                                                                                                                                                                                                                                                                                                                                                                BIOCHEM. BIOPHYS. RES. COMMUN.
                                                                                 SEQUENCE
                                                                                                                                                                                             PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                          BARTELS J.
                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                          VARIANT
                                                                                                    VARIANT
                                                                                                                                                              SIGNAL
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BARTELS J., SCHLUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TIFFANY H.L., MURPHY P.M., YOSHIE O
J. BIOL. CHEM. 271:7725-7730(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE-SMALL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                             VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                    EIN H.,
                                                                                                                                                                                                                                                                                                                                                                                                                         TISSUE-LUNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-PLACENTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BIOCHEM. BIOPHYS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CHRISTOPHERS E., SCHROEDER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-FORESKIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KITAURA M., NAKAJIMA T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 96205964.
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                   71 DICADPKKKWVQ 82
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                                                                                                                                                                                                                                                                                                                                      FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, I FEATURE OF ALLERGIC INFLAMMATORY REACTIONS.
SUBCELLULAR LOCATION: EXTRACELLULAR.
                                                                                                                                                                                                                                                                                                                             PTM: O-GLYCOSYLATED (PROBABLE).
                                                                                                                                                                                                                                                                                                          SIMILARITY: BELONGS TO THE
                                                                                                                                                                                                                                                                                                                    INDUCTION: BY THE-ALPHA,
EICLDPKQKWIQ
                                        Similarity
8; Conse
                                                                                                                                                                                  PS00472; SMALL_CYTOKINES_CC; IL; CYTOKINE; CHEMOTAXIS; GLY
                                                                                                                                                                                                                                                                                               (CHEMOKINE CC).
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SCHLUETER C.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SCHLUETER C.,
                                                                                        RESPONSE;
1 23
24 97
32 57
32 73
7 7
3 23 23
51 51
79 79
                                        Conservative
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                                                79.28;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF
                                                                                                                                                                        POLYMORPHISM
                                                                                                                                                                                                                                                                                                                                                                                                   KULKE R., CHRISTOPHERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMUN.
                                                                                W.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     J.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           YOSHIE O.;
                                                 Score 80;
Pred. No.
                                       Pred.
2; 1
                                                                                      BY SIMILARITY.
BY SIMILARITY.
BY SIMILARITY.
L -> P (IN CLONE 1)
A -> T (IN CLONE 1)
R -> S (IN CLONE 1)
R -> R (IN CLONE 1)
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HE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                             POTENTIAL.
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                                                 DB 1; I
1.59e-05;
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                                                         Length 97;
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53).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AND VARIANTS
                                      Indels
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Best Local S
Matches
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01-OCT-1996 (REL. 3
01-OCT-1996 (REL. 3
01-OCT-1996 (REL. 3
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P46653;
01-NOV-1995
01-NOV-1995
01-OCT-1996
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DISULFID
SEQUENCE
MEDLINE; 95355132.

MINNERLY J.C., BAGANOFF M.P., DEPPELER C.L., KELLER B.T., MINNERLY J.C., BAGANOFF M.P., DEPPELER C.L., KELLER B.T., MINNERLY J.C., FRETLAND D.J., BOLANOWSKI M.A.;

INFLAMMATION 19:313-331(1995).

-!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,

-!- FUNCTION: IT IS RELEASED FROM SEVERAL CELL TYPES IN NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN RESPONSE TO AN INFLAMMATORY STIMULUS (BY SIMILARITY).

-!- SUBUNIT: HOMODIMER (BY SIMILARITY).

-!- SIMILARITY: BELIONGS TO THE INTERCRINE ALPHA FAMILY (SMALL CYTOKINE C-X-C) (CHEMOKINE CXC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROSITE; I
                                                                                                                                                                                                                                                                                                                                     TISSUE-BLOOD;
MEDLINE; 96003435.
VILLINGER F.J., BRAR S.S., MAYNE A.E.,
J. IMMUNOL. 155:3946-3954(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C-X-C) (CHEMOKINE CXC).
EMBL; U19839; G644796; -.
PROSITE; PS00471; SMALL_CYTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -!- FUNCTION: IL-8 IS A CHEMOTACTIC FACTOR THAT ATTRACTS NEUTROPHILS,
BASOCHILS, AND T-CELLS, BUT NOT MONOCYTES. IT IS ALSO INVOLVED IN
NEUTROPHIL ACTIVATION. IT IS RELEASED FROM SEVERAL CELL TYPES IN
RESPONSE TO AN INFLAMMATORY STIMULUS (BY SIMILARITY).
-!- SUBUNIT: HOMODIMER (BY SIMILARITY).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIGNAL
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J. IMMUNOL. 155:3946-3954(1995).
                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A. SPECIES-M.MULATTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EUKARYOTA; METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MACAQUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MACACA MULATTA (RHESUS MACAQUE),
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CERCOCEBUS TORQUATUS ATYS (RED-CROWNED MANGABEY) (SOOTY MANGABEY).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INTERLEUKIN-8 PRECURSOR (IL-8).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE; 96003435
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CHEMOTAXIS; INFLAMMATORY RESPONSE;
1 22 BY SIMILARITY.
23 101 INTERLEUKIN-8.
34 61 BY SIMILARITY.
36 77 BY SIMILARITY.
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34, LAST SEQUENCE UPDATE)
34, LAST ANNOTATION UPDATE)
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32, LAST SEQUENCE UPDATE)
34, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                          TISSUE-BLOOD;
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No. 1.59e-05;
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Best Local &
Matches
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120 AA.
1- NOV-1995 (REL. 32, CREATED)
01-NOV-1995 (REL. 32, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1 PRECURSOR (MCP-1)
CHEMOATTRACTANT PROTEIN-1).
SCYA2 OR MCP1.
CAVIA PORCELLIE: '---
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EMBL; U19851; G644820; -.
EMBL; S78555; G1042228; -.
PROSITE; PS00471; SMALL_CYTOKINES_CXC; 1.
PROSITE; PS00471; INFLAMMATORY RESPONSE;
BY SIMILARITY.
22
****PREPLEUKIN-8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-OCT-1996 (REL. 34, CREATED)
01-OCT-1996 (REL. 34, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2) (MONOCYTE CHEMOATTRACTANT PROTEIN 2).
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P49873;
01-OCT-1996
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DISULFID
SEQUENCE
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DISULFID
SEQUENCE
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CHAIN
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BIOCHEM. BIOPHYS. RES. COMMUN. 205:148-153(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUS SCROFA (PIG).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOD_RES
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                                                                                                                                                                                                                                                      73 EVCADPQQKWVQ 84
                                                                                                                                                                                                                                                                                                                             Local
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SUBUNIT: MONOMER OR HOMODIME!
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8; Conser
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24
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472; SMALL_CYTOKINES_CC;
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61
77
                                                                                                                                                                                                                                                                                                                           78.2%;
66.7%;
                                                                                                                                                                                                                                                                                                                                                                                 10903 MW;
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66.78;
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75
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99
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Pred.
2; M
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3; 1
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BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                      PYRROLIDONE CARBOXYLIC SIMILARITY).
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MONOCYTE CHEMOTACTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BY SIMILARITY.
BY SIMILARITY.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HEPARIN-BINDING;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                 B7620BCF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INTERCRINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  77D78AA0 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ne 80; DB 1; Le
1. No. 1.59e-05;
Mismatches 1;
                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             THAT
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                                                                                                                                                                                                                                                                                                                             No. 2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTRACTS
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                                                                                                                                                                                                                                                                                                                           DB 1; I
2.72e-05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 101;
                                                                                                                                                                                                                                                                                                                                         Length 99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFLAMMATORY RESPONSE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MONOCYTES. THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROTEIN (
                                                             (MONOCYTE
                                                                                                                                                                                                                                                                                                          Indels
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(SMALL CYTOKINE
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Best Local &
Matches
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Q62401;
01-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                               DISULFID
DISULFID
CARBOHYD
                                                                                                                                                                                                          CHEMOKINE).
SCYA12 OR MCP5.
SCYA12 OR MCP5.
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
EUTHERIA; RODENTIA.
[1]
                                                                                                                                                          JIA G.-Q., GONZALO J.A., LLOYD C., WERSHIL B.K., GUTIERREZ-RAMOS J.C., J. EXP. MED. 184:1939-1951(1996).
                                                                                                                                                                               SEQUENCE FROM N.A. MEDLINE; 97079149.
                                                                                                                                                                                                                                             MONOCYTE
                                                                                                                                                                                                                                                  01-NOV-1997 (REL.
01-NOV-1997 (REL.
15-JUL-1998 (REL.
                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. STRAIN-Z; TISSUE-S MEDLINE; 93267104.
                                                                                                                   SARAFI M.N.,
LUSTER A.D.;
                                                                                                                                    MEDLINE;
                                                                                                                                           SEQUENCE FROM
                                                                                                                                                                                                       EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                             MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                      CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                    CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL;
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    J. IMMUNOL.

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                                                                                                                                                                                                                                                                                                                            71 EVCADPTQKWVQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   -C) (CHEMOKINE CC).
L04985; G349821; -
                                                                                                                                                                                                                                                                                                                                           h 78.2%;
Similarity 66.7%;
8; Conservative
                                                                                                                                                                                                                                             CHEMOTACTIC
                                                                                                                                                                                                                                                                                                                                                                                                                                    CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE-SPLEEN;
                                                                                                                                                                                                                                                                                                                                                                        33
34
97
120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       150:5025-5032(1993).
                                                                                                                             GARCIA-ZEPEDA E.A.,
                                                                                                                                                                                                                                                                                                                                                                                                             24
24
                                                                                                                                           N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 G349821;
                                                                                                                                                                                                                                                                                                                                                                          <u>Α</u>,
                                                                                                                                                                                                                                                                                                                                                                                                                                   '2; SMALL_CYTOKINES_CC; 1.
TAXIS; SIGNAL; INFLAMMATORY RESPONSE; GLYCOPROTEIN
                                                                                                                                                                                                                                                                                 STANDARD;
                                                                                                                                                                                                                                                  35,
                                                                                                                                                                                                                                                                                                                            82
                                                                                                                                                                                                                                                                                                               12
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120
24
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73
97
13741
                                                                                                                                                                                                                                         , LAST SEQUENCE UPDATE)
, LAST ANNOTATION UPDATE)
PROTEIN 5 PRECURSOR (MCP-5) (MCP-1 RELATED
                                                                                                                                                                                                                                                                  CREATED)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HOMODIMER; IN EQUI
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                                                                                                                                                                                                                                                                                                                                                  Score 79;
Pred. No.
                                                                                                                                                                                                                                                                                                                                           Pred.
2; 1
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BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                      POTENTIAL.
22FAD257 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                    BY SIMILARITY.
MONOCYTE CHEMOTACTIC
                                                                                                                                                                                                                                                                                 PRT;
                                                                                                                            MACLEAN J.A.,
                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                        KREMER L.,
                                                                                                                                                                                                                                                                                                                                         DB 1; Leuy
. 2.72e-05;
                                                                                                                                                                                                                                                                                 104 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EQUILIBRIUM (BY RINE BETA FAMILY
                           BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                              TETRAPODA;
                                                                                                                                                                                                                                                                                                                                                          Length 120;
                                                                                                                                                                         E
                                                                                                                             CHARO
                                                                                                                                                                        L., MARTINEZ A.C.,
                                                                                                                                                                                                                                                                                                                                                                                                               ACID (BY
                                                                                                                             H.F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIMILARITY)
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                                                                                                       MONOCYTES
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                                                  NODES,
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PER SULP TO SULP THE BEST OF THE SULP TO SULP THE SULP TH
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                                                                                PROSITE; PS00472; SMALL_CYTOKINES_CG; 1.
EOSINOPHIL; CYTOKINE; CHEMOTAXIS; GLYCOPROTEIN; SIGNAL SIGNAL 24 96 EOTAXIN.
CHAIN 24 96 EOTAXIN.
DISULFID 31 56 BY SIMILARITY.
DISULFID 32 72 BY SIMILARITY.
CARBOHYD 93 93 POTENTIAL.
CONFLICT 88 88 D-> G (IN REF. 2).
SEQUENCE 96 AA; 10753 MW; DD28C7E5 CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
    Matches
                          Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE; 94157409.

JOSE P.J., GRIFETTHS-JOHNSON D.A., COLLINS P.D., WALSH I MOGBEL R., TOTTY N.F., TRUONG O., HSUAN J.J., WILLIAMS J. EXP. MED. 179.881-887(1994).

-!- FUNCTION: IN RESPONSE TO THE PRESENCE OF ALLERGENS, DIRECTLY PROMOTES THE ACCUMULATION OF EOSINOPHILS, FEATURE OF ALLERGIC INFLAMMATORY REACTIONS.
-!- SUBCELLULAR LOCATION: EXTRACELLULAR.
-!- TISSUE SPECIFICITY: LUNG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DISULFID
DISULFID
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SIGNAL
CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE; 95091818.
JOSE P.J., ADCOCK I.M.,
WELLS T.C., WILLIAMS T..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUN-1994 (REL.
01-OCT-1996 (REL.
15-JUL-1998 (REL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
CYTOKINE; CHEMOTAXIS; SIGNAL; INFLAMMATO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EUKARYOTA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                            HSSP;
                                                                                                                                                                                                                                                                                                                                                                                     -1- PTM: O-GLYCOSYLATED (PROBABLE).
-1- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN-HARTLEY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE OF 24-96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BIOCHEM. BIOPHYS. RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ROTHENBERG M.E., LUSTER A.D., LIL
J. EXP. MED. 181:1211-1216(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE; 95173589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EUTHERIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAVIA PORCELLUS (GUINEA PIG).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EOTA_CAVPO
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    Local Similarity 
nes 8; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           72 EICADPKEKWV
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                                                                                                                                                                                                                                                                                                C-C) (CHEMOKINE CC).
; U18941; G687656; -.
; X77603; G602552; -.
; P13500; IMCA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     METAZOA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         104 AA;
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    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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4
33
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TISSUE-LUNG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29, CREATED)
34, LAST SEQUENCE UPDATE)
36, LAST ANNOTATION UPDAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           104
58
74
                        74.38;
72.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHORDATA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             T.J., POWI
S. COMMUN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         . 28;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ¥.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        POWER C.A.;
MUN. 205:788-794(1994).
  Score 75; DB 1; I
Pred. No. 2.27e-04;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 77; DB 1; I
Pred. No. 7.91e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; INFLAMMATORY RESPONSE.
BY SIMILARITY.
MONOCYTE CHEMOTACTIC PROTEIN
BY SIMILARITY.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ?
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LILLY C.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08FA6C35 CRC32;
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    2
                                          Length 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 104;
                                                                                                                                                                                                                                                           SIGNAL;
    Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           , THIS PROTEIN
A PROMINENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       G
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Gaps
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                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                       MCPB_BOVIN STAN
P80343;
01-FEB-1995 (REL. 3
01-FEB-1995 (REL. 3
15-JUL-1998 (REL. 3
                                                                                                                                                                                                                                                                                                                                                                                                       DISULFID
DISULFID
CONFLICT
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         J. IMMUNOL.
01-FEB-1995 (REL. 31, CREATED)
01-FEB-1995 (REL. 31, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 1B (MCP-1B) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAKAGAWA H., SHIOTA S., TAKANO K., SHIBATA F., KATO H.;
BIOCHEM. BIOPHYS. RES. COMMUN. 220:945-948(1996).

-!- FUNCTION: MONOKINE WITH INFLAMMATORY AND CHEMOKINETIC PROPERTIES
HAS CHEMOTACTIC ACTIVITY FOR MONOCYTES, NEUTROPHILS, EOSINOPHILS
BASOPHILS, AND LYMPHOCYTES REQUIRED FOR LUNG TNF-ALPHA
PRODUCTION, NEUTROPHIL RECRUITMENT AND SUBSEQUENT LUNG INJURY AN
MAY FUNCTION AS AN AUTOCRINE MEDIATOR FOR THE MACROPHAGE
PRODUCTION OF TNF-ALPHA WHICH IN TURN UP-REGULATES VASCULAR
ADHESION MOLECULES REQUIRED FOR NEUTROPHIL INFLUX. THIS PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN-LONG EVANS; TISSUE-LUNG; MEDLINE; 95238980.
SHANLEY T.P., SCHWAL H., FRIEDL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 95298037.
SHI M.M., GODLESKI J.J., PAULAUSKIS BIOCHEM. BIOPHYS. RES. COMMUN. 211:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MIIA_RAT STANDARD; PRT; 92 AA.
P50229;
01-0CT-1996 (REL. 34, CREATED)
01-0CT-1996 (REL. 34, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 35, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 1-ALPHA PRECURSOR (MIP-1-ALPHA).
SCYA3 OR MIP1A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- INDUCTION: BY LIPOPOLYSACCHARIDE (LPS)
-!- SIMILARITY: BELONGS TO THE INTERCRINE
C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RATTUS NORVEGICUS (RAT)
EUKARYOTA; METAZOA; CHO
                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CYTOKINE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. STRAIN-LONG EVANS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN-CD-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN-WISTAR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE OF 24-57.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EUTHERIA; RODENTIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (EDLINE;
                                                                                                                                                                                                   71 ICADPKKKWVQ 81
|| || ||:|
2 ICLDPKQKWIQ 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BINDS HEPARIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 U22414; G790633; -
U06435; G459150; -
                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PS00472;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHEMOTAXIS;
                                                                                                                                                                                                                                                                                                                                                                                  92
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57 6 57
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                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SMALL_CYTOKINES_CC; 1.
KIS; INFLAMMATORY RESPO
                                                                                                                                                                                                                                                                                                                  73.3%;
                                                                                                                                                                                                                                                                                                                                                                                  10335
                                                                                                                                                                                                                                                                                                                                                                                                         57
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     92
92
73
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                                                                                                                                                                                                                                                                                                                                                                              MACROPHAGE INFLAMMATORY F
BY SIMILARITY.
BY SIMILARITY.
A -> T (IN REF. 2).
C -> W (IN REF. 2 AND 3).
                                                                                                                                                                                                                                                                                        Score 74;
Pred. No. :
3; Misma:
                                                                                                                PRT;
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211:289-295(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                H.P.,
                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                  No. 3.84e-04;
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                                                                                                                                                                                                                                                                                                                                         DB 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SIGNAL;
                                                                                                                                                                                                                                                                                                                                    Length 92;
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RESOLUTION OF THE PROPERTY OF 
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Best Local Similarity
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DISULFID
SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MCP2_HUMAN STANDARD; PRT; 99 AA.
P80075; P78388;
01-DEC-1992 (REL. 24, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MONOCYTE CHEMOTACTIC PROTEIN 2 PRECURSOR (MCP-2)
MEDLINE; 97053697.

KIM K.-S., RAJARATHNAM K., C
FEBS LETT. 395:277-282(1996)
-!- FUNCTION: CHEMOTACTIC FA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CHEMOATTRACTANT PROTEIN 2) (HC14).
SCYAB OR SCYAIO OR MCP2.
HOMO SAPIENS (HUMAN).
EUKARYOTA: METAZOA; CHORDATA; VERT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROOST P., WUYTS A., LENAERTS J.-F
BIOCHEMISTRY 33:13406-13412(1994).
                                                                                                                                                                                                                                                                     SEQUENCE OF 26-99.
TISSUE-OSTEOSARCOMA;
                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 91
CHANG H.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE-KIDNEY;
MEDLINE; 95034
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VAN
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                                                                                                                                                                                                              VAN
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                                                                                                                      SUBUNIT.
                                                                                                                                                                                                                                MEDLINE; 92308855.
                                                                                                                                                                                                                                                                                                                                                          INT. IMMUNOL.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A., MEDLINE; 97237052.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          48
                                                                                                                                                                             N DAMME J., PROOST P., LENAERTS J.-P., EXP. MED. 176:59-65(1992).
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SINILARITY: BELONGS TO THE INTERCRINE BETA C-C) (CHEMOKINE CC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COILLIE E., FROYEN F., NOMIYAMA H., MIURA R., AELST I., VAN DAMME J., OPDENAKKER G.; CHEM. BIOPHYS. RES. COMMUN. 231:726-730(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COILLIE E., FITEN P.,
DAMME J., OPDENAKKER G
OMICS 40:323-331(1997).
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                                                                                                                                                                                                                                                                                                                                                                                                             OF 23-99 FROM N.A.
91207938.
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PS00472; SMALL_CYTOKINES_CC;
CHEMOTAXIS; HEPARIN-BINDING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97224420
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METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10
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                                                                                                                                                                                                                                                                                                                                                          1:388-399(1989).
                                                                                                                                                                                                                                                                                                                                                                                        'T)
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                                                                                                                                                                                                                                                                                                                                                                                  FREEMAN G.J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AND VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENAERTS J.-P., VAN DAMME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         G.;
   FACTOR THAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NOMIYAMA
                                                            CLARK-LEWIS I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BY SIMILARITY.
BY SIMILARITY.
66172F08 CRC32;
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Pred. No. 6.45e-04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GLN-69
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      ATTRACTS MONOCYTES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SAKAKI Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MIURA R.,
                                                                                                                                                                                                           OPDENAKKER
                                                                                                                                                                                                                                                                                                                                                                                  J.D.,
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                                                            SYKES B.D.;
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   LYMPHOCYTES
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Best Local S
Matches
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01-NOV-1997 (REL. 35, CREATED)
01-NOV-1997 (REL. 35, LAST SEQUENCE UPDATE)
01-NOV-1997 (REL. 36, LAST ANNOTATION UPDATE)
15-JUL-1998 (REL. 36, LAST ANNOTATION UPDATE)
MACROPHAGE INFLAMMATORY PROTEIN 4 PRECURSOR (MIP-4) (PULMONARY AND ACTIVATION-REGULATED CHEMOKINE) (CC CHEMOKINE PARC) (ALTERNATIVE ACTIVATION-REGULATED ASSOCIATED CC CHEMOKINE 1) (AMAC-1).
MEDLINE; 97275308.

MEDLINE; 97275308.

J. LEUROC. BIOL. 61:545-550(1997).

J. FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS

MONOCYTES OR GRANULOCYTES. MAY BE INVOLVED

MONOCYTES OR GRANULOCYTES IN LYMPH NODES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOD_RES
DISULFID
DISULFID
VARIANT
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -!- INDUCTION: BY INTERFERON GAMMA, MITOGENS AND INTERLEUKIN-1.
-!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE C-C-) (CHEMOKINE CC).
EMBL; X99886; EZ79930; ALT_INIT.
EMBL; X10802; EZ94088; -.
                                                                                                                                                                                                                                                                                                                                            MEDLINE;
HIESHIMA
                                                                                                                                                                                                                                                                        HIESHIMA K., IMAI T., BABA M., SHOUDAI K., ISHIZUKA K., NAKAGAWA T., TSURUTA J., TAKEYA M., SAKAKI Y., TAKATSUKI K., MIURA R., OPDENAKKER G., VAN DAMME J., YOSHIE O., NOMIYAMA H.; J. IMMUNOL. 159:1140-1149(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MIP4_HUMAN P55774;
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MEDLINE; 97376836
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TISSUE SPECIFICITY: HIGHEST EXPRESSION FOUND IN THE SMALL
INTESTINE AND PERIPHERAL BLOOD CELLS. INTERMEDIATE LEVELS SEEN
THE HEART, PLACENTA, LUNG, SKELETAL MUSCLE, THYMUS, COLON, OVAR
SPINAL CORD AND PANCREAS. LOW LEVELS SEEN IN THE BRAIN, LIVER,
SPLEEN AND PROSTATE.
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BY SIMILARITY.
K -> Q.
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HEPARIN-BINDING;
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1. No. 6.45e-04;
Mismatches 1.
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CC LEVEL EXPRESSION IS SEEN IN LYMPHOID TISSUES SUCH AS LYMPH NODES,
CC THYMUS AND APPENDIX.
CC -: INDUCTION: BY LIPOPOLYSACCHARIDE (LPS).
CC -: SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE CC).
CC C-: (CHEMOKINE CC).
DR EMBL; ABO00221; D1022520; -.
DR PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW CYTOKINE; CHEMOTAXIS; INFLAMMATORY RESPONSE; SIGNAL.
ET SIGNAL
1 21 89 MACROPHAGE INFLAMMATORY PROTEIN 4.
ET CHAIN 21 89 MACROPHAGE INFLAMMATORY PROTEIN 4.
ET DISULFID 30 54 BY SIMILARITY.
SQ SEQUENCE 89 AA; 9849 MW; 052AA3DC CRC32;

QUETY MATCH 17.1.3%; SCOTE 72; DB 1; Length 89;
Best Local Similarity 58.3%; Pred. No. 1.08e-03;
MATCHES 7; CONSERVATIVE 3; Mismatches 2; Indels 0; Gaps 0;
Db 68 QICADPNKKWVQ 79
1 EICLDPKOKWIQ 12

Search completed: Thu Apr 1 07:44:22 1999
Job time: 8 secs.
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1 77 76. 2 97 6 052812 INTERLEUKIN-8 (FRAGMEN 1.78e-04 2.39e-03 3.72 71.3 97 13 057411 ILYMPHOTACTIN PRECURSOR 2.39e-03 3.72 71.3 395 11 035188 NEUROTACTIN RECURSOR 2.39e-03 2.39e-03 50.50 11 035933 FRACTALKINE. 2.39e-03 1.055933 FRACTALKINE. 2.39e-03 1.055933 FRACTALKINE. 2.39e-03 1.055933 FRACTALKINE. 2.39e-03 1.05593 FRACTALKINE. 2.39e-03 1.05590 FRACTALKINE. 2.09e-02 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-03 1.056-0	Fred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.  SUMMARIES  Result Query No. Score Match Length DB ID  Description  Pred. No.	e: sptremb18  1:sp_archea 2:sp_bacteria 3:sp_fungi 4:sp_human 5:sp_invertebrate 6:sp_mammal 7:sp_mhc 8:sp_organe 9:sp_phage 10:sp_plant 11:sp_rodent 12:sp_unclass! 13:sp_vertebrate 14:sp_virus 13:sp_vertebrate 33.708; scale 0.764 10:sp_virus 33.708; scale 0.764	>U (1 10 1 PA PA Ga Ga Li	omputing Research Unit. y of Edinburgh, U.K. ord Molecular Ltd h, using Smith-Waterman alg MasPar time 4.93 Seconds	TM)
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O57411;

O1-UN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)

O1-UN-1998 (TREMBLREL. 06, LAST SEQUENCE UPDATE)

O1-UN-1998 (TREMBLREL. 06, LAST ANNOTATION UPDATE)

LYMPHOTACTIN PRECURSOR.

GALLUS GALLUS (CHICKEN).

GALLUS GALLUS, CHORDATA; VERTEBRATA; ARCHOSAURIA; AVES;

EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ARCHOSAURIA; AVES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    O62812;
O62812;
O62812;
O1-AUG-1998 (TREMBLREL. 07
O1-AUG-1998 (TREMBLREL. 07
O1-AUG-1998 (TREMBLREL. 07
INTERLEUKIN-8 (FRAGMENT).
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95
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O35188
O35188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ROSSI D.L., BAZAN J.F., ZLOTNIK A.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
EMBL; AF006742; G2827882; -.
                                                                                                                                                                                                                                                                                                                                                       SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                         SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE-SPLEEN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
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NON_TER 97 97
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
TISSUE-BRONCHOALVEOLAR TISSUE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EQUUS CABALLUS (HORSE).
EUKARYOTA; METAZOA; CHORDATA;
PERISSODACTYLA; EQUIDAE; EQUUS
                                                                                                                                                                                      72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          75
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Similarity .63.6%;
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97 AA; 10742 MW;
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larity 58.3%;
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11131 MW;
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Pred. No. 2.39e-03;
2; Mismatches 2
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Pred. No. 1.78e-04;
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LYMPHOTACTIN.
3290101C CRC32;
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O1-JUN-1998 (TREMBLREL. 06, CR
O1-JUN-1998 (TREMBLREL. 08, LA
O1-NOV-1998 (TREMBLREL. 08, LA
B LYMPHOCYTE CHEMOATTRACTANT B
MUS MUSCULUS (MOUSE).

EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NATURE 387:611-617(1997).

EMBL; AF010586; G2317698; G2917698; MGD; MGI:1097153; SCYD1.

PFAM; PF00048; 118; 1.

SEQUENCE 395 AA; 42098 M
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035933;
01-JAN-1998
01-JAN-1998
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MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; MAMMALIA; EUTHERIA; RODENTIA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JAN-1998 (TREMBLREL.
01-JAN-1998 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
NEUROTACTIN.
SEQUENCE FROM N.A. STRAIN=C57BL/6J;
                                                               SCIUROGNATHI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE
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STRAIN-BALB/C; TISSUE-BRAIN;
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EUKARYOTA; METAZOA; CHORDATA;
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                                                                                                                                                                                                                                                                                                                                                             73 FCADPKEKWVQ
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larity 63.6%;
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                                                                                CHORDATA;
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                                                                 MURINAE;
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05, LAST SEQUENCE UPDATE)
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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Pred. No. 2.39e-03;
3; Mismatches 1
                                                               VERTEBRATA;
E; MUS.
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                                                                                                                                                                                                                                                                                                                                                                                                                        DB 11;
2.39e-03;
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                                                                                   MAMMALIA;
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Best Local S
Matches
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Best Local
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                                                                                                                                                                                                                   SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

UTANS-SCHNEITZ U., LOREZ H., KL

LESSLAUER W.;

"A novel rat CC chemokine, iden

display, is upregulated in brai

J. NEUROIMMUNOL. 0:0-0(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE; 98146056.

GUNN M.D., NGO V.N., ANSEL K.M., E
WILLIAMS L.T.;
"A B-cell-homing chemokine made in
Burkitt's lymphoma receptor-1.";
NATURE 391:799-803(1998).
EMBL; AF044196; G2911374; ...
SEQUENCE 109 AA; 11927 MW; BB6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JUL-1997
01-JUL-1997
01-NOV-1998
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01-NOV-1998
01-NOV-1998
CC CHEMOKINE
                                                                                                                                                                                                                                                                                                                                                                                                 LIAKC.

MUS MUSCULUS (MOUSE).

EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;

EUKARYOTA; MOTIROGNATHI; MURIDAE; MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LT 6
000175
000175;
SUBMITTED (JUL-1998) TO EMBL/GENBANK/DDBJ EMBL; AF053313; G3551819; -. EMBL; AJ007862; E1312757; -. SIGNAL. 1 27 POTENTIAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
PATEL V.P., KREIDER B.
NARDELLI B., PIPPALLA
GENTZ R., GAROTTA G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                        SEQUENCE FROM N.A. VILLARES R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     089093;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             74 ICVNPRAKWLQ
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; U85768; G1916252; -.
;; PF00048; i18; 1.
;ENCE 119 AA; 13119 M
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B (TREMBLREL. 08, 08)
B (TREMBLREL. 08, 08)
B (TREMBLREL. 08, 08)
NE ST38 PRECURSOR.
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58.3%;
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54.5%;
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08,
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 68; DB 4; 1
Pred. No. 1.79e-02
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CREATED)
LAST SEQUENCE UI
LAST ANNOTATION
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERTEBRATA; MAMMALIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDF526F0 CRC32;
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inflammation.";
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THOTAKURA
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1.09e-02;
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                                                                                                                                                                                                                                                                                                                                                                                                                     MAMMALIA;
MUS.
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                                                                                                              DATA
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                                                                                                                                                                                                                                                                                                                                    DΑ
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                                                                                                                                                                                                                                                                                                                                    SILVA J.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
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Best Local S
Matches
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00585;
01-JUL-1997 (TREMBLREL. 04, LAST:
01-JUL-1998 (TREMBLREL. 08, LAST:
01-NOV-1998 (TREMBLREL. 08, LAST:
BETA CHEMOKINE EXODUS-2.
HOMO SAPIENS (HUMAN).
""VARRYOTA; METAZOA: CHORDATA; VF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 6; Conser
                                                                                                                                        SULT 9

O88430;
O88430;
O1-NOV-1998 (TREMBLREL 08, CRE.
O1-NOV-1998 (TREMBLREL 08, LAS.
O1-NOV-1998 (TREMBLREL 08, LAS.
O1-NOV-1998 (TREMBLREL 08, LAS.
O1-NOV-1998 (TREMBLREL)
O1-NOV-1998 (TREMBLREL)
CC CHEMOKINE ABCD-1.
MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; V.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   000585
000585;
01-JUL-1997
01-JUL-1997
01-NOV-1998
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SEQUENCE
TISSUE-LIVER;
MEDLINE; 98353531.
SCHANIEL C., PARDALI E.,
SHIMIZU T., SEIDL T., AN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAGIRA M., IMAI T., HIESHIMA K., KUSUDA J., RIDANPAA NISHIMURA M., KAKIZAKI M., NOMIYAMA H., YOSHIE O.; SUBMITTED (AUG-1997) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; U88320; G2196920; -. EMBL; AF001979; G2624925; -. EMBL; AB002409; D1022673; -. EMBL; AB002409; D1022673; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HEDRICK J.A., ZLOTNIK A.;
"Identification and characterization of containing six conserved cysteines.";
J. IMMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. HROMAS R.A., GRAY P., SUBMITTED (JUN-1997)
                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A. HEDRICK J.A., ZLOTNIK A.; SUBMITTED (MAY-1997) TO E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE; 97400322.
                                                                                                                         RODENTIA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PFAM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAGIRA M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                           73
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PF00048;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity 58.3%;
7; Conservative
                                                                                                                         SCIUROGNATHI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97
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llarity 60.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28
AA;
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AA;
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10826 MW;
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14646 MW;
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    ANDERSSON J., M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL/GENBANK/DDBJ
                                                                                                                         MURIDAE;
                                                                                                                                                                                                    CREATED)
LAST SEQUENCE UP
LAST ANNOTATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 67; DB 11;
Pred. No. 2.94e-02;
3; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 67; DB 4; I
Pred. No. 2.94e-02;
3; Mismatches
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053405BD CRC32;
                                                                                                                       VERTEBRATA; MAMMALIA; AE; MURINAE; MUS.
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      MELCHERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     134
    SPELETAS M., ELCHERS F., R
                                                                                                                                                                                                                                                                                      92
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 134;
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    ROLINK A.G.,
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Q14745;
Q14745;
Q1-NOV-1996 (TREMBLREL. 0
01-NOV-1996 (TREMBLREL. 0
01-NOV-1998 (TREMBLREL. 0
                                                  PFAM; PF00048; i18;
SIGNAL.
NON_TER 1
SIGNAL <1
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01-AUG-1998
01-AUG-1998
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"Activated m
CC chemokine
J. EXP. MED.
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073912
073912;
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GALLUS GALLUS (CHICKEN).
GALLUS GALLUS (CHICKEN).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ARCHOSAURIA; AVES;
NPOGNATHAE; GALLIFORMES; PHASIANIDAE; PHASIANINAE; GALLUS.
                  CHAIN
NON_TER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  X 60
                                                                                                                                                                                                                                                                                                             LD78 ALPHA BETA PRECURSOR (FRAGMENT) HOMO SAPIENS (HUMAN). EUKARYOTA; METAZOA; CHORDATA; VERTEB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
TISSUE-MACROPHAGE LIKE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               K60
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SEQUENCE
                                                                                                                          EMBL; D63785; G961440; PROSITE; PS00472; SMAL
                                                                                                                                                            SUBMITTED (AUG-1995) TO EMBL/GENBANK/DDBJ
                                                                                                                                                                                   MIYAKAWA T.;
                                                                                                                                                                                                ISHIZUKA K., IGATA-YI
KATSURAGI S., KIN Y.,
                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                            CATARRHINI;
                                                                                                                                                                                                                                     TISSUE-BRAIN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 54.5%;
nes 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               75 EVCLDPTAPWV
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21
104 AA;
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) PRECURSOR.
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 80
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121
131
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                                                                                                                            SMALL_CYTOKINES_CC;
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54.5%;
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                                                                                                                                                                                                                                                                                                           CHORDATA; VERTEBRATA;
                                                                                                                                                                                                  R., NARUSE K., NAKASHIMA OHMOTO Y., NOMIYAMA H., 1
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01, LAST SEQUENCE UPDATE)
08, LAST ANNOTATION UPDATE)
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3; M
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Pred. No. 7.83e-02;
2; Mismatches 3
                                   POTENTIAL.
LD78 ALPHA
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 3F87F1C6 CRC32;
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                                   ALPHA BETA
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on activated T cells.";
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4.81e-02;
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                                                                                                                                                                                                  OHUCHI K.,
M., MIURA R.,
                                                                                                                                                                                                                                                                                                           EUTHERIA; PRIMATES;
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Query Match
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P97884;
01-MAY-1997 (TREMBLREL. 0
01-MAY-1997 (TREMBLREL. 0
01-NOV-1998 (TREMBLREL. 0
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Q99664;
Q1-MAY-1997
Q1-MAY-1997
Q1-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                        CC CHEMOKINE EXODUS.
RATTUS NORVEGICUS (RAT).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
                                                                    display, is upregulated in brady NEUROIMMUNOIL. 0:0-0(1998).
EMBL; U90447; G1899246; ---
EMBL; AF053312; G3551817; ---
PFAM; PF00048; il8; 1.
                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
STRAIN-SPRAGUE-DAWLEY;
KELKER G.S., MACIE-ELEWSKI-LENOIR D., LEE E.D., MAKI R.A.;
SUBMITTED (FEB-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Cloning and characterization of exode all of the state o
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HROMAS R., GRAY P.W.,
BELL G.I., TAKEDA J.,
KLEMSZ M.J.;
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                                      SEQUENCE
                                                                                                                                                                                                SEQUENCE FROM N.A.
STRAIN-FISHER 344; TISSUE-BRAIN;
UTANS-SCHNEITZ U., LOREZ H., KLI
                                                                                                                                                                                                                                                                                                                                                                       SCIUROGNATHI; MURIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATARRHINI; HOMINIDAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
                                                                                                                                                                  'A novel rat CC chemokine,
                                                                                                                                                                                     ESSLAUER W.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EQUENCE FROM N.A. ISSUE PANCREAS;
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Local Similarity 41.7%;
hes 5; Conservative
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                                    AA;
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                                    10875 MW;
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 62.4%;
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ARONICA
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                                                                                                                                                                                                                                                                                                                                                                        MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                             803,
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                                                                                                                                                 identified by targe brain inflammation.
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Pred. No.
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LAST ANNOTATION UPDATE)
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Score
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LAST ANNOTATION UPDATE)
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                                    3FC09DD8 CRC32;
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 63;
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                                                                                                                                                                                                      W.E.F.,
                                                                                                                                                                  by targeted
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Best Local S
Matches
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015467; PRELIMINARY;
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                                                                                                          IL'IV ANCOLONGE ILLICK OR SCYA16.
HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
EUKARYOTA; HOMINIDAE; HOMO.
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01-JUN-1998
01-JUN-1998
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SEQUENCE
                                      HEDRICK J. SUBMITTED
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LEGLER D.F., LOETSCHER M., STUBER ROOS R. BAGGIOLINI M., MOSER B.;
"B cell-attracting chemokine 1, a human C lymphoid tissues, selectively attracts B J. EXP. MED. 187:655-660(1998).
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MEDLINE; 98146056.

GUNN M.D., NGO V.N., ANSEL K.M., EKLAND E.H.

WILLIAMS L.T.;

"A B -cell-homing chemokine made in lymphoid
Burkitt's lymphoma receptor-1.";

MATURE 391:799-803(1998).
SEQUENCE FROM N.A
                                                                               SEQUENCE
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RRHINI; HOMINIDAE; HOMO.
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J.A., HELMS A., I
ED (NOV-1997) TO
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                                  GORMAN D., ZLOTNIK A.;
EMBL/GENBANK/DDBJ DATA BANKS
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                                                                                                                                     VERTEBRATA; MAMMALIA;
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d. No. 2.05e-01;
Mismatches 3;
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Best Local Similarity

Matches 5; Conser
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O93442;
O93442;
O1-NOV-1998 (TREMBLREL. 08, CO1-NOV-1998 (TREMBLREL. 08, IO1-NOV-1998 (TREMBLREL 08, IO1-NOV-199
  093238;
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CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAJAKSHIN A.M., MECHETINA L.V., ALABYEV B.Y., TARANIN A.V. "Identification of the interleukin 8 homologue in lamprey fluviatilis; early evolutionary divergence of chemokines SUBMITTED (JUL-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LFCA-1 PROTEIN PRECURSOR.

LAMPETRA FLUVIATILIS (RIVER LAMPREY).

EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; CEPHALASPIDOMORPHI;

PETROMYZONTIFORMES; PETROMYZONTIDAE; LAMPETRA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
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EMBL; U91746; G2581781; -
EMBL; AB007454; D1024963; -
EMBL; AF088219; G3719365; -
EMBL; AF055467; G3395776; -
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SUBMITTED (AUG-1998) To
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-LIVER, HIESHIMA K., FUKUDA S., SHOUDAI K., HIESHIMA K., FUKUDA S., YOSHIE O., NOMIYAMA H.;
BIOCHIM. BIOPHYS. ACTA 0:0-0(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SIGNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EMBL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
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                                                                                                                PRELIMINARY;
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larity 41.7%;
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EMBL; AF002987; G2196553; -.

EMBL; AF002987 ZINC_FINGER_C2H2; 4.

PROSITE: PS00028; ZI-C2H2; 5.

ZINC-FINGER; METAL-BINDING; DNA-BINDING.

SEQUENCE 584 AA; 64756 MW; B1DE5647 CRC32;
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EUKARYOTA; METAZOA;
CIONIDAE; CIONA.
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"Structure of a region of SUBMITTED (AUG-1998) TO
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                                                                                                                                                                                                                                                                                                                                                                                         CATARRHINI; HOMINIDAE;
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EUKARYOTA; METAZOA; CHORDATA;
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FUJIKI K., NAKAO M., SHIN D., YANO T.;

CONA cloning of a carp CC chemokine homologous to mammalian
                                                                                        NOMIYAMA
                                                                                                                            SEQUENCE FROM N.A.
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                                                                                                                                                                                                                KIM B.E.;
(JAN-1998)
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Pred. No. 8.39e-01
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8.39e-01;
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                                                                                                                                                                                                                DATA BANKS
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RESULT 20
ID P70357;
AC P70357;
DT 01-FEB-1997
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DT 01-NOV-1998
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Best Local :
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Q98158; PRELIMINARY;
Q98158; O12569;
01-FEB-1997 (TREMBLREL. (
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01-NOY-1998 (TREMBLREL. (
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EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
EUKARYOTA; MURIDAE; MURINAE; MUS.
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DISULFID
DISULFID
SEQUENCE
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SEQUENCE
SEQUENCE FROM N.A.
MEDLINE; 97094384.
MOORE P.S., BASHOFF C., WEISS R.A., CHANG Y.;
MOOLecular mimicry of human cytokine and cytokine response pathway
                                                                                                                                                        KAPOSI'S SARCOMA-ASSOCIATED HERPI
VIRUSES; DSDNA VIRUSES, NO RNA ST
GAMMAHERPESVIRINAE; RHADINOVIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL; U63146; G1515450; -. PROSITE; PS00213; LIPOCALIN; 1. PFAM; PF00061; lipocalin; 1.
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SIGNAL 1 23 POTENTIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; AF043341; G2905632; EMBL; AF088219; G3719366;
                                                                                                                                                                                                                                               ORF K6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PLASMA;
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|:||: :||:
1 EICLDPKQKWIQ 12
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22
138
201 AA;
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91 AA;
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(TREMBLREL. 02,
(TREMBLREL. 08,
                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
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201 I
178 I
147 I
23206 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RETINOL-BINDING;
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                                                                                                                                                                                                                                                                       02,
                                                                                                                                                                                RNA STAGE; HERPESVIRIDAE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 59;
Pred. No.
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LAST SEQUENCE UPDATE)
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Pred. No. 1.33e+00;
5; Mismatches 3
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PLASMA RETINOL-BINDING
BY SIMILARITY.
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CF404FAD CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                           PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AA915F05 CRC32;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 11; L. 1.33e+00; 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     201
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SUN R., LIN S.-F., MILLER G.
SUBMITTED (SEP-1996) TO EMBI:
EMBL: U75688; G1718266; -.
EMBL: U74885; G1658273; -.
EMBL: U748872; G2246546; -.
EMBL: U71866; G3551763; -.
EMBL: U71866; G3551763; -.
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01-NOV-1996 (TREMBLREL. 0
01-NOV-1998 (TREMBLREL. 0
01-NOV-1998 (TREMBLREL)
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"Isolation and characterization of Marek's disease virus (MDV) cDNAs mapping to the BamHI-12, BamHI-Q2, and BamHI-L fragments of the MDV genome from lymphoblastoid cells transformed and persistently infects with MDV.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
NICHOLAS J., RUVOLO V.R.,
HENDRICKSON S., GUO H.G.,
SUBMITTED (NOV-1996) TO EN
                                                                                                                                                                                                                                                                                                                                                 GALLID HERPESVIRUS TYPE VIRUSES; DSDNA VIRUSES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P. SUBMITTED (MAY-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RUSSO J.J., BOHENZKY PARRY J.P., PERUZZI I SUBMITTED (OCT-1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NEIPEL F., ALBRECHT J.C., FLECKENS "Cell-homologous genes in the Kapchuman herpesvirus 8: determinants J. VIROL. 71:4187-4192(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. MEDLINE; 97296220.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RUSSO J.J., BOHENZKY R.A., CHIEN M.C., CHEN J., YAN M., PARRY J.P., PERUZZI D., EDELMAN I.S., CHANG Y., MOORE P. "Nucleotide sequence of the Kaposi sarcoma-associated he
                                                                                                                          PENG Q., ZENG M., BHUIYAN Z.A., SHIRAZI Y.;
                                                                                                                                                                                         MEDLINE; 96074534.
                                                                                                                                                                                                                             STRAIN-GA;
                                                                                                                                                                                                                                                                                                                   ALPHAHERPESVIRINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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274:1739-1744(1996).
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41.78;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R.A., CHIEN M.C., CHEN J., YAN M., D., EDELMAN I.S., CHANG Y., MOORE P. TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TO EMBL/GENBANK/DDBJ DATA BANKS
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., HAYWARD G.S., REITZ M.S.;
EMBL/GENBANK/DDBJ DATA BANKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FLECKENSTEIN B.;
the Kaposi's sarcoma-associated rhadinovirus
rminants of its pathogenicity?";
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Pred. No.
4; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                                             CREATED)
LAST SEQUENCE UP
LAST ANNOTATION
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2.10e+00;
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                                                                                                                                                        TANAKA A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 UPDATE)
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                                                                                                                                                           NONOYAMA M.,
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RESULT 23

ID 778423; 00067

AC P78423; 00067

DT 01-MAY-1997 (
DT 01-NOV-1998 (
DE CX3C CHEMOKIN
GN A-152E5.2.
OS HOMO SAPIENS
OC CATARRHINI; H
RN [1]
RP SEQUENCE FROM
RX MEDLINE; 9717.
RA BAZAN JF; F; E
RA GREAVES D.R.;
RT 7A NEW CLASS
RL NATURE 385:64
RN [2]
RA SEQUENCE FROM
RA SAMS M.D.; I
BRANDON R.;
RT "HOMO SAPIENS
RL SUBMITTED (JI
DR EMBL; U91835;
DR EMBL; U94487;
DR EMBL; U94487;
DR EMBL; U94487;
DR EMBL; U94487;
DR EMBL; GRANL
FT CHAIN
SQ SEQUENCE 3
20
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Best Local S
Matches
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Best Local S
Matches
                                                                                           ULT 24
082387;
082387;
01.NOV-1998 (TREMBLREL.
01.NOV-1998 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
PUTATIVE CELL DIVISION P
                                              ARABIDOPSIS THALIANA (MOUSE-EAR CRESS)
EUKARYOTA; VIRIDIPLANTAE; CHAROPHYTA/SHYTA; GROUP; EMI
TRACHEOPHYTA; EUPHYLLOPHYTES; SPERMATOPHYTA; MACNOLIOPHYTA
EUDICOTYLEDONS; ROSIDAE; CAPPARALES; BRASSICACEAE; ARABIDO)
                                                                                                                                                                                                                                                                                                                                                                          SUBMITTED (JUN-1998) TO EMBL, EMBL; U91835; G1899259; -. EMBL; U84487; G1888523; -. EMBL; AC004382; G3252821; -.
                                                                                                                                                                                                                                                                                                                                                                                                               ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN J., BRANDON R., KIM U.J., KERLAVAGE A.R., VENTER J.C.; "Homo sapiens Chromosome 16 BAC Clone CIT987SK-A-152E5."; SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE; 97177111.

BAZAN J.F., BACON K.B., HARDIM/
GREAVES D.R., ZLOTNIK A., SCHAI
"A new class of membrane-bound
NATURE 385:640-644(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1998 (TE
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EMBL; U34966; G1185444; -.
PFAM; PF00048; 118; 1.
NON TER 1 1
SEQUENCE 203 AA; 23132 M
STRAIN-CV. COLUMBIA; ROUNSLEY S.D., LIN X.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A. MEDLINE; 97177111.
                          SEQUENCE FROM N.A.
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5; Conse
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Similarity 45.5%;
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397
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(TREMBLREL.)
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(TREMBLREL. 0)
(INE PRECURSOR.
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larity 50.0%;
Conservative
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03,
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                                                                                                          PROTEIN
                                                                                                                    888
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SCHALL T.J
                                                                                                                                                                                                                                                                                                                  MW;
                                                                                                                    CREATED)
LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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LAST
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Pred. No. 2.10e+00;
3; Mismatches
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Pred. No. 2.10e+00;
3; Mismatches 3
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CX3C CHEMOKINE.
C8093D7D CRC32;
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  SHEA
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 T.P.,
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 FUJII
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  C.Y.,
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  MASON
                                                                       EMBRYOPHYTA;
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RESULT ON ACCOMMENTAL BROWN BETT OF THE BE
RESULT 26

ID 009002 PRELIMINARY; PRT; 133 AA.

AC 009002;
DT 01-JUL-1997 (TREMBLREL 04, CREATED)
TO1-JUL-1997 (TREMBLREL 04, LAST SEQUENCE UPDATE)
TO1-NOV-1998 (TREMBLREL 08, LAST ANNOTATION UPDATE)
E SMALL INDUCIBLE CYTOKINE A21 (TCA4).

N SCYA21.
SMUS MUSCULUS (MACCONT.)
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN ADAMS M.D., LOFTUS B.J., ZHOU L., CROSBY M., FUHRMANN ADAMS M.R., KIM U.J., KERLAVAGE A.R., VENTER J.C.; "HOMO SADIENS Chromosome 16 BAC clone CIT9875K-A-152E SUBMITITED (JUN-1998) TO EMBL/GENBANK/DDBJ DATA BANKS. EMBL; U83171; G1931581; -... EMBL; U83239; G2062425; -.. EMBL; AC004382; G3252820; -..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CHANG M.S., MCNINCH J., ELIAS III C., MANTHEY (
MENG T., BOONE T., ANDREW D.P.;
SUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HOMO SAPIENS (HUMAN).
EUKARYOTA; METAZOA; CHORDATA;
CATARRHINI; HOMINIDAE; HOMO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUL-1997 (TREMBLREL. 04, CREATED)
01-JUL-1997 (TREMBLREL. 04, LAST SEQUENCE UPDATE)
01-NOV-1998 (TREMBLREL. 08, LAST ANNOTATION UPDATE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                    EUKARYOTA; MET
SCIUROGNATHI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIGNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
GODISKA R., CHANTRY D., RAPORT C.J.,
MANTOVANI A., GRAY P.W.;
J. EXP. MED. 185:0-0(0).
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                                             MUSCULUS (MOUSE).
ARYOTA; METAZOA; C
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                                                                                                                                                                                                                                                                                                               EICLDPKQKWI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PF00048; il8; 1.
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5; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 535 AA;
                                                                                                                                                                                                                                                                                                                                                                                               56.4%;
llarity 54.5%;
Conservative
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25
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                      MURIDAE;
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93
                                           CHORDATA; VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               59484 MW;
                      MURINAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WW.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 58;
Pred. No.
2; Misma
                                                                                                                                                                                                                                                                                                                                                                                                                      Score 57; DB 4; I
Pred. No. 3.29e+00;
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MACROPHAGE-DERIVED CHEMOKINE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERTEBRATA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8AF744C7 CRC32;
                         NUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ., CROSBY M., FUHRMANN J., A.R., VENTER J.C.; clone CIT987SK-A-152E5.";
                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOZZANI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 10;
2.10e+00;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CRC32;
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                                           MAMMALIA;
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J.C.;
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                                           EUTHERIA;
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sequence.";
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                                           RODENTIA;
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Best Local
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EMBL; AF001980; G2624927; -
MGD; MGI:1097677; SCYA21.
PFAM; PF00048; i18; 1.
SEQUENCE 133 AA; 14558 M
7LT 28
017348
017348;
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009006;
01-JUL-1997
01-AUG-1998
01-NOV-1998
                                                                                                                                                                                                                                       HROMAS R., KIM C.H., KLEMSZ M., KRATHWOHL M., FIFE K., CO
SCHNIZLEIN-BICK C., BROXMEYER H.E.;
"ISOlation and characterization of Exodus-2, a novel C-C.
with a unique 37-amino acid carboxyl-terminal extension."
J. IMMUNOL. 159:2554-2558(1997).
                                                                                                                                                                                                                                                                                                                                       MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA;
SCIUROGNATHI; MURIDAE; MURINAE; MUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
TISSUE-THYMUS;
TANABE S., LU Z., LUO Y., QUACKENBUSH E.J., BERMAN M.A.,
COLLINS-RACIE L.A., MI S., REILLY C., LO D., JACOBS K.A.
CUBMITTED (JUN-1997) TO EMBL/GENBANK/DDBJ DATA BANKS.
                                                                                                                                         SUBMITTED (JUN-1998) TO EMBL/GENBANK/DDBJ
EMBL; U88322; G3169697; -.
MGD; MGI:1097677; SCYA21.
PFAM; PF00048; 118; 1.
SEQUENCE 133 AA; 14600 MW; B34A5E22 CF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HEDRICK J.A., ZLOTNIK A.; "Identification and characterization of a novel beta chemokine containing six conserved cysteines."; J. IMMUNOL. 159:1589-1593(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A. HEDRICK J.A., ZLOTNIK A.; SUBMITTED (MAY-1997) TO E
                                                                                                                                                                                                HROMAS R.A.;
                                                                                                                                                                                                                                                                                                TISSUE-TOTAL FETUS; MEDLINE; 97444139.
                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                      BETA CHEMOKINE
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                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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Local Similarity 41.7%;
                                                                           73
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|:|:|:|:|:|
1 EICLDPKQKWIQ 12
                                                     EICLDPKQKWIQ
                                                                 ELCANPEEGWVQ
                                                                                               h 56.4%;
Similarity 41.7%;
5; Conservative
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8 (TREMBLREL.
8 (TREMBLREL.
            PRELIMINARY;
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Pred. No.
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDAT
                                                                                               Score 57; DB 11;
Pred. No. 3.29e+00;
4; Mismatches 3
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            PRT;
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                                                                                                                                           B34A5E22 CRC32;
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                                                                                                                    Length 133;
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Best Local S
Matches
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Best Local Similarity
Matches 4; Conser
                                                                                                                                                                     SEQUENCE FROM ..... (A2B3);
STRAIN-RK32 (A2B3);
XOCONOSTLE-CAZARES B., LEON-RAMIREZ
MICROBIOLOGY 142:377-387(1996).
EMBL; X87748; G861151; -.
EMBL; X87748; G861151; -.
                                                                                                                                                                                                                                                                                                                                                     CHS1.
USTILAGO MAYDIS (SMUT FUNGUS).
USTILAGO MAYDIS (SMUT FUNGUS).
USTILAGINOMYCETES;
USTILAGINOMYCETIDAE; USTILAGINALES; USTILAGINACEAE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WATERSTON R.;
SUBMITTED (SEP-1997) TO EMBL/GENBANK/DDBJ DATA BANKS
EMBL; AF026207; G2435555; -.
SEQUENCE 331 AA; 36627 MW; EA4C85EB CRC32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WILSON R., AINSCOUGH R., ANDERSON K., BAYNES C., BERKS M., BONFIELD J.,
BURTON J., CONNELL M., COPSEY T., COOPER J., COULSON A., CRAXTON M.,
DEAR S., DU Z., DURBIN R., FAVELLO A., FULTON L., GARDNER A., GREEN P.,
HAWKINS T., HILLIER L., JIER M., JOHNSTON L., JONES M., KERSHAW J.,
KIRSTEN J., LAISTER N., LATREILLE P., LIGHTWING J., LLOYD C.,
MCMURRAY A., MORTIMORE B., O'CALLAGHAN M., PARSONS J., PERCY C.,
RIFKEN L., ROOPRA A., SAUNDERS D., SHOWNKEEN R., SMALDON N., SMITH A.,
SONNHAMMER E., STADEN R., SULSTON J., THIERRY-MIEG J., THOMAS K.,
VAUGHAN K., WATERSTON R., WATSON A., WEINSTOCK L.,
WILKINSON-SPROAT J., WOHLDMAN P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-NOV-1996 (TREMBLREL.
01-NOV-1996 (TREMBLREL.
01-MAY-1997 (TREMBLREL.
CHITIN SYNTHETASE I.
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STRAIN-BRISTOL N2;
MAGGI L., HARPER M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. STRAIN=BRISTOL N2; MEDLINE; 94150718.
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EUKARYOTA; METAZOA; NEMATODA;
RHABDITINA; RHABDITOIDEA; RHAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-JAN-1998 (TREMBLREL.
01-JAN-1998 (TREMBLREL.
01-NOV-1998 (TREMBLREL.
H42K12.2 PROTEIN.
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STRAIN-BRISTOL N2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "2.2 Mb of contiguous nucleotide sequence from chromosome III of C.
elegans.";
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                              483 EICAETKGKW 492
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                                                                                                                  Local Similarity
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EICLDPKOKW
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larity 40.0%;
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LAST SEQUENT LAST ANNOTED
                                                                                                                  Score 57; DB 3;
Pred. No. 3.29e+00
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Pred. No. 3.29e+00;
4; Mismatches
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ANNOTATION UPDATE)
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O93599; PREMBLREL 08, C
01-NOV-1998 (TREMBLREL 08, L
01-NOV-1998 (TREMBLREL 08, L
                                                                                                                                                       OATES A.C.;
THESIS (1998), UNIVERSITY OF A
EMBL; AJ005693; E1326184; -.
SEQUENCE 806 AA; 92151 MW;
                                                                                                                                                                                                                                                  BRACHYDANIO RERIO (ZEBRAFISH) (ZEBRA DANIO).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; ACTINOPTERYGII; NEOPTERYGII;
TELEOSTEI; EUTELEOSTEI; OSTARIOPHYSI; CYPRINIFORMES; CYPRINOIDEA;
                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                      CYPRINIDAE; RASBORINAE;
                                                                                                                                                                                                                                                                                                      TRANSCRIPTION FACTOR.
                                                                          258 NICLDRLETWI 268
                                                                                             56.48;
Local Similarity 54.58;
nes 6; Conservation
                                                1 EICLDPKQKWI
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           1 07:45:10 1999
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                                                                                                                                                                         OF MELBOURNE,
                                                                                                   Score 57; DB 13;
Pred. No. 3.29e+00;
2; Mismatches 3
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LAST SEQUENCE UPDATE)
LAST ANNOTATION UPDATE)
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